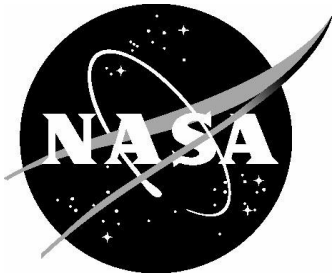
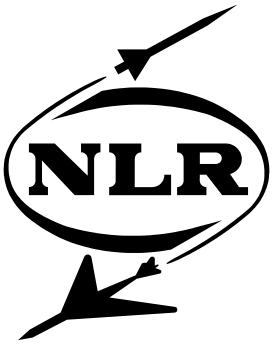
NLR / NASA -000000





Command Reference Traffic Manager v10.0.09

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Introduction

This document contains a description of all Traffic Manager (TMX) commands as of v10.0.09.

All command lines start with the command followed by command line arguments if necessary. The arguments are separated by one comma and/or space(s). When the first argument is an aircraft id that exists, it is also allowed to swap command and id. So "ALT KL104, FL250" is equivalent to "KL104 ALT FL250".

To obtain help-text and/or the argument list, a '?' can be used as the first and only in-line argument with the command.

Document layout

Each command (CMD) is described in detail, together with the command arguments and if required a remarks field. Furthermore, examples are provided to illustrate the use of the command.

CMD

Arguments: arg1/arg2, [arg3]
Description: *text*
Remark: *text*
Example: 'CMD arg2 arg3'

Argument	*Description*
Arg1	*text*
Arg2	*text*
Arg3	*text*

Arguments between '[' and ']' are optional. Arguments separated by '/' are selections. Certain command arguments can be by-passed by using '-1' (i.e. ADDWPT).

Incorrect argument declaration will result in '? Syntax Error'

Mouse

The mouse can be used for a range of functions:

- Left mouse click = select aircraft, (lat,lon), hdg, alt etc.
- Double Left mouse click = display information of selected aircraft
- Right mouse click = Center radar-screen to this position
- Shift + Left Mouse button = Zoom in on Radar-screen or Navigation Display
- Shift + Right Mouse button = Zoom out on Radar-screen or Navigation Display
- Alt + Left Mouse button = Zoom in on Vertical Navigation Display
- Alt + Right Mouse button = Zoom out on Vertical Navigation Display
- Ctrl + Left Mouse button = Select traffic label on Radar-screen to move
- Ctrl + Shift+ Left Mouse button = Select aircraft to be moved (use 'Q' to increase altitude, 'A' to decrease altitude, '<' to turn left and '>' to turn right. Esc to return normal.

With most commands it is possible to click on the screen, whenever it is required to select an aircraft or to provide a lat/lon coordinate as an argument to the command.

Menu buttons

TMX depicts two menu button rows. The top row represents the main menu options available and the bottom row depicts the sub-menu selection option for this menu. The commands associated with the menu buttons can be adjusted in the .\data\buttons.dat file

Basic commands

A subset of the basic commands is provided in the following section.

Simulation Control

IC	Initialize condition, reset simulation
OP	Start or continue running
HOLD	Pause or hold simulation
EXIT	Exit program (or use ESC key)
FF	Start in Fast Forward mode (fast-time using DT)
DT	Set real-time factor for fast-time simulation
NOISE	Switch noise on/off
SAVEIC	Save current situation as IC
AUTOSCEN	Opens filename.ASC and filename.RTE for scenario generation
AUTOSTOP	Sets start/stop recording FX10 aircraft (see autostop.dat)

Display Commands

++++ / -----	Multiple zoom in (+) or zoom out (-)
V++++/V--------	Multiple vertical zoom in/out (Navigation Display only)
PAN	Pan radar window
TRACE	Keep panning the display on specified aircraft
NAVDISP/ND	Show nav display for specified aircraft (TAB to toggle)
SWRAD	Toggles display features on or off
LABEL	Cycles info level of labels
RADAR	Switch back to radar display (TAB toggles)
WPTLABEL	Switch Waypoint labels on/off
SYMBOL	Switch aircraft symbol in radar display
CIRCLE	Draw circle around lat,lon with radius in nm
BOX	Draw box from coordinates two opposing corners
LINE	Draw line between lat/lon positions
POLYGON	Daw polygon using coordinates
DEL label	Delete drawing object (circle,line,polygon or box)

Traffic Commands

CRE	Create an aircraft at specified position (use mouse)
DEL	Deletes an aircraft
MDEL	Deletes all aircraft within rectangle (use mouse)
MCRE	Multiple create within current window, use '*' as wildcard

RENAME	Rename an aircraft
MOVE	Move an aircraft (use mouse)
REPOS	reposition controlled traffic to FF position
RETYPE	Set aircraft type to different type
POS	Retrieves position & info on aircraft (double click a/c = POS)
HDG	Heading command
SPD	Speed command
ALT	Altitude command (optional with vertical speed)
VS	Vertical speed (first set commanded altitude)
LNAV	Set artificial pilot (navigation & resolution) on/off
VNAV	Set vertical navigation on/off
SNAV	Set speed navigation on/off
DEST	Set destination for navigation purposes
ORIG	Set origin for bookkeeping purposes
ADDWPT	Add waypoint to route of aircraft
ADDRTE	Add predefined route to aircraft
DIRECT	Set active waypoint
DELWPT	Delete waypoint from route
DELRTE	Delete entire route
LISTRTE	List route for a/c (pagenr mainly used internally)

ASAS Commands

ADSB	Set Ads-B model parameters
PDS	Set Pair Dependent Speed model parameters
ASAS	Equips a/c with ASAS or not
RESO	Switch on/off ASAS resolution module
RESONR	Set conflict resolution method (see conflict.dat)
ZONER	Protected zone radius
ZONEDH	Protected zone half height
RMETHH	Horizontal resolution method
RMETHV	Vertical resolution method
PRIORULES	Use priority rules during conflict detection and resolution
FFLEVEL	Set level above which Free Flight is allowed
DFFLEVEL	Set thickness of transition layer below fflevel
DTLOOK	Set look ahead time for State based CD&R
DTLOOKINT	Set look ahead time for Intent based CD&R
DTNOLOOK	Set look ahead between conflict probing
DTLOOKATC	Set lookahead time for controlled traffic
NORESO	Set aircraft not to avoid
PREDASAS	Equips a/c with ASAS or not
BGPASAS	Use PASAS for all equipped aircraft in the scenario
SWNLRPASAS	Use NLR PASAS or ACCoRD CP system
FILTCONF	Set Conflict Detection time lag filter on/off
FILTTRED	Set time lag for filtering ‘RED’ urgency conflicts
FILTTAMB	Set time lag for filtering ‘AMBER’ urgency conflicts

Miscellaneous Commands

WIND	Define a wind vector at a given position
WINDGRID	Load a predefined 3D wind field
GETWIND	Poll wind field
TREACT	Set pilot reaction time
NAVDB	Select a new navigation database e.g. ‘navdb usa’
DIST	Calculate bearing and distance from A to B
QTEPOS	Calculate lat/lon given bearing and distance [nm]
POLY	Create or load polygon
EXP	Assign polygon to be an experiment sector
HDGREF M/T	Set default headings to Magnetic or True
AREA	Specify experiment area (leaving a/c deleted)
GRAB	Dump screen in BMP file
MOVIE	Record BMP frames to be edited into a movie.

Data logging Commands

DATLOGTYP	Set the type of data that needs to be logged
DATALOG	Set generic data logging in *.tmx file on/off
INTRLOG	Set intrusion logging in *.int file on/off
TRAFLOG	Set traffic parameter logging in *.csv file on/off
LOG	Write text time stamped to log file
TRAFLOGDT	Set time step for traffic parameter logging
TRAFRECDT	Set time step for traffic parameter Ethernet recording
DATALOGDT	Set time step for generic data logging

TMX Commands

'+' or '='

Arguments: none
Description: Zoom IN on radar screen or navigation display
Example: '+++++': Zoom in 5x

'-'

Arguments: none
Description: Zoom OUT on radar screen or navigation display
Example: '-----': Zoom out 5x

ACTRW/ACRW

Arguments: id/*/ALL, runway(0-36) [L/R/C]
Description: Assigns an active runway to an aircraft
Example: 'ACTRW KL101 36R'

Argument	*Description*
id	Aircraft identified (max 8 char)
*/ALL	Apply to all aircraft
runway	Runway identifier (int)
L/R/C	Left/Right/Center

ADDAPPR

Arguments: acid, dest,_appr, trns
Description: Adds an approach to the route
Example: 'ADDAPPR KL101 EHAM_SUGOLA1 FL70'

Argument	*Description*
Acid	Apply to this aircraft
Dest	Destination airport id
Appr	Approach id
Trns	Transition id

ADDCRTE

See CORTE

ADDLEG

Arguments: acid/*/#,(airway/direct),wpname,[wpalt],[wpspd]
Description: Adds a leg to the route with given constraints
Example: 'ADDLEG KL101, , SUGOL, 30000, 250'

Argument	*Description*
Acid	Aircraft identified (max 8 char)
*/#	Apply to last created aircraft
Airway/direct	Not used
Wpname	Waypoint name
wpalt	Altitude constraint (ft)

wpspd	Speed constraint (IAS/MACH)

ADDLL

See ADDWPT

ADDRTE

Arguments: acid/*/#, route_id
Description: Loads a predefined route. See .\data\routes
Remark: Route file format is equal to ASTOR and APS algorithm
Example: 'ADDRTE KL101 _BAMBE18R_ICKEL_CONVILS18R.RTE'

Argument	*Description*
Acid	Aircraft identified (max 8 char)
*/#	Apply to last created aircraft
Route_id	Route identifier

ADDSTAR

Arguments: acid/*/#, dest,_star, rwy, trns
Description: Adds a STAR to the aircraft route
Example: 'ADDSTAR KL101 EHAM ARTIP2C_18R FL60'

Argument	*Description*
Acid	Aircraft identified
*/#	Apply to last created aircraft
Dest	Destination airport id
Star	Specified STAR
Rwy	Runway identifier
Trns	Transition id

ADDTUBE

Arguments: acid/*/#,dh,dy,lat,lon,alt,wphtype,wpname'
Description: Adds a waypoint with height and width (Tube point) to the route with given constraints.
Remark: All arguments required
Example: 'ADDTUBE KL101, 100, 50, 52.4563,4.647, 30000, 0, URK1'

Argument	*Description*
Acid	Aircraft identified (max 8 char)
*/#	Apply to last created aircraft
dh	Tube height (m)
dy	Tube width (m)
Lat	Latitude (deg)
Lon	Longitude (deg)
alt	Altitude (alt)
wphtyp	Waypoint horizontal type (not used)
wpname	Waypoint/Tube point name

ADDWPT

Arguments: acid/*/#,(wpname/lat,lon),[wpalt],[wpspd],[RTA], [(wphtyp ,tubeh,tubew)],[afterwp]
Description: Adds an waypoint to the route with given constraints
Remark: To skip certain constraints use '-1'.
Example: 'ADDWPT KL101, URK2, 30000, -1, 1530, URK1': Add waypoint 'URK2' with an altitude constraint of 3000ft and a RTA of 1530 seconds after waypoint 'URK1'.

Argument	*Description*
Acid	Aircraft identified (max 8 char)
*/#	Apply to last created aircraft
wpname	Waypoint name
lat	Latitude (deg)
lon	Longitude (deg)
wpalt	Altitude constraint (ft)
wpspd	Speed constraint (IAS/MACH)
RTA	Required Time of Arrival constraint (sec)
wphtyp	Waypoint horizontal type
tubeh	Tube height
tubew	Tube width
afterwp	Insert new waypoint after this waypoint

ADSB

Arguments: id/*/ALL/DEF[AULT]
(MINRANGE / MAXRANGE (TRANS/REC) range) /
(UPD type sec/ON/OFF) /
(FAIL [TRANS/REC/BOTH/NONE]) /
(DROP ALL/NONE/AUTO) /
(ERROR [ON/OFF/FIX/RDM | LAT/LON/ALT/SPD/TRK/VS/OFF err_value]) /
(WPT #wp)
Description: Set ADS-B settings
Remark: Initial default settings will be read from .\data\adsb.dat
Example 1: 'ADSB DEF MINRANGE REC 100.': Set the default minimum receiver range to 100 Nm.
Example 2: 'ADSB KL101 UPD SV 2': Update State Vector for KL101 to once every 2 seconds
Example 3: 'ADSB * ERROR TRK 1': Put an error on track signal for all aircraft currently in simulation. Keep in mind default is not changed!

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
DEF[AULT]	Use to change default setting. Next aircraft will use new default and no longer the data file settings
MINRANGE	Minimum Ads-B range
MAXRANGE	Maximum Ads-B range
TRANS	Setting applies to transmitter
REC	Setting applies to receiver

BOTH	Use both TRANS and REC
NONE	Use neither TRANS nor REC
range	Range in Nm
UPD[ATE]	Update message
type	Message type: SV/MS/RF/TS/TR/TC
Sec/ON/OFF	Update rate / activate / deactivate message
ALL	Drop all messages
NONE	Drop no messages
AUTO	Use drop model to drop message between min range and max range
FIX	Use a fixed error value
RDM	Use a random error value within +err_value and –err_value
Err_value	Signal error on LAT/LON/ALT/SPD/TRK/VS
WPT	Used to change total number of Trajectory Change points that will be sent
#wp	Number of waypoints

ADSBEQP

Arguments: id/*/ALL/RFS/MCS, ON/OFF/TOGGLE
Description: Equip aircraft with ADS-B
Example: 'AE KL101 OFF': remove ADS-B equipment from KL101

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
RFS	Apply to RFS
MCS	Apply to master MCS (not used)
ON	Equip
OFF	Un-equip
TOGGLE	Toggles equipment on/off

ADSBNR

Arguments: id/*/ALL #
Description: Set ADS-B model type
Remark: No model variation has been implemented yet
Example: 'ADSBNR KL101 3'

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
#	0=Perfect, 1=Mode-S, 2=UAT long, 3=UAT short

AE

See ADSBEQP

AL

See ADDLEG

ALT/A

Arguments: acid, alt [,vs]
Description: Manual altitude override
Remark: Manual override will turn off VNAV
Example: 'ALT KL101 31000 1500'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
Alt	Altitude (ft)
vs	Vertical speed (fpm)

ALTH/AHOLD/ALTHOLD/AH

Arguments: acid/*/ALL
Description: Altitude hold mode
Example: 'AH KL101'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft

AREA

Arguments: (lata,lona,latb,lonb,[latc,lonc])/OFF
Description: Defines an experiment area (see also EXP)
Remark: When defined data logging will take place only for aircraft in the experiment area. Aircraft leaving the experiment area will be deleted (see also SWDELAC)
Example: 'AREA 30.24,-93.52,31.24,-92.53'

Argument	*Description*
Lata	Latitude point 1
Lona	Longitude point 1
Latb	Latitude point 2
Lonb	Longitude point 2
Latc	Latitude point 3
Lonc	Longitude point 3
OFF	Turn experiment area off

ARM

See WEAPON

ASAS

Arguments: id/*/ALL/RFS/MCS ,ON/OFF/TOGGLE
Description: Equip aircraft with ASAS system
Example: 'ASAS * ON'

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
RFS	Apply to RFS
MCS	Apply to master MCS (not used)

ON	Turn ASAS on
OFF	Turn ASAS off
TOGGLE	Toggles ASAS on/off

ASSIGN/UNASSIGN

Arguments: polyname pseudo#
Description: Assigns/un-assigns a pseudo sector to a pseudo station
Example: ‘ASSIGN PSDO01 1`

Argument	*Description*
Polyname	Pseudo type polygon name
Pseudo#	Pseudo station number

AT

Arguments: acid/*/#, wpname [(SPD spd)/(ALT alt)]
Description: Adds a speed or altitude constraint to the waypoint
Remark: SPD or ALT is required to specify constraint type
Example: ‘AT KL101 URK2 ALT 30000’

Argument	*Description*
Acid	Aircraft identified (max 8 char)
*/#	Apply to last created aircraft
wpname	Waypoint name
SPD	Type identifier
ALT	Type identifier
Spd	Speed constraint (kts)
Alt	Altitude constraint (ft)

ATACK

Arguments: id, targetid
Description: Assign a target aircraft to be attacked
Example: ‘ATACK NL007 US000’

Argument	*Description*
id	Apply only to this aircraft
targetid	Target aircraft call-sign

ATCAM/ATCAMAC

Arguments: acid
Description: Control to identify which aircraft has access to the ATCAM alogrithm
Example: ‘ATCAM AF304’

Argument	*Description*
Acid	Aircraft identifier to be assigned to ATCAM

ATCFREQ

Arguments: id/*/ALL
Description: Reset aircraft frequency changes
Example: ‘ATCFREQ *’

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft

ATCDTREACT

Arguments: [ULTR/FAST/NORM/SLOW/STOP], sec
Description: Set ATC model random delta on reaction delay time (see atctreact)
Remark: Not adding a mode will imply all modes. Master RND mode has to be active (see .\data\config.dat)
Example: 'ATCDTREACT FAST 5': a random delta of +/- 5 sec on fast reaction time.

Argument	*Description*
ULTR	Setting for ultra fast reactions
FAST	Setting for fast reactions
NORM	Setting for normal reactions
SLOW	Setting for slow reactions
STOP	Setting for very slow reactions
sec	Delta reaction time [sec]

ATCPASAS/ATCPA/ATCPREDASAS

Arguments: ON/OFF
Description: Turn ON/OFF conflict prevention for unequipped IFR aircraft
Example: 'ATCPASAS ON'

Argument	*Description*
ON	Turn ATCPASAS on
OFF	Turn ATCPASAS off

ATCTREACT/ATCREACT

Arguments: [ULTR/FAST/NORM/SLOW/STOP], sec
Description: Set ATC model reaction delay time
Remark: Not adding a mode will imply all modes
Example: 'ATCTREACT 120': all modes cause a reaction delay of 120 sec.

Argument	*Description*
ULTR	Setting for ultra fast reactions
FAST	Setting for fast reactions
NORM	Setting for normal reactions
SLOW	Setting for slow reactions
STOP	Setting for very slow reactions
sec	Reaction time [sec]

ATCSET/ATCSETTINGS

Arguments: [RNG/RANGE/LAT/LON/ATHOST] [par]
Description: Set ATC interface variables (?)
Remark: Only for interface, no functionality
Example: 'ATCSET ATHOST ON'

Argument	*Description*
RNG/RANGE	Parameter to set ATC range
LAT	Parameter to set ATC latitude
LON	Parameter to set ATC longitude
ATHOST	Parameter to set ATHOST parameter ON/OFF
par	value

ATM

Arguments: (FL/PA/FM)+(GEN/AIR/GND) or MFFGEN/MFFEXP
Description: Set Air Traffic Management procedure
Remark: Better define a polygon and use POLYATM to set ATM procedure.
Example: 'ATM MFFEXP'

Argument	*Description*
FL/PA/FM+(GEN/AIR/GND) or MFFGEN/MFFEXP	Settings for individual scenarios

ATS

See SNAV

ATTACK

Arguments: id, targetid
Description: Let id attack targetid
Example: 'ATTACK US102 LB224'

Argument	*Description*
Id	Agressor aircraft
Targetid	Target aircraft

AUTO/AUTOMAT

See FULLAUTO

AUTOEVE

Arguments: TIME tstart,dtmin,dtmax,tlast
Arguments: PAR x,n,p1,p2,..,pn
Description: Automatic event handling (??)
Example: 'AUTOEVE TIME 0 20, 60, 900'

Argument	*Description*
TIME	Token to add time parameters
PAR	Token to add events
tstart	Start timeof event generation
dtmin	Minimum event interval time
dtmax	Maximum event interval time
tlast	Time that the event will last
x	Number of active parameters
n	Number of options per parametrs
p	Event parameter

AUTOSCEN

Arguments: file/OFF
Description: Automatic scenario generation based on generation file (*.asc)
Example: 'AUTOSCEN TEST.ASC'

Argument	*Description*
file	Automatic scenario generation file
OFF	Turn off AUTOSCEN

AUTOSTOP

Arguments: ON/OFF
Description: Automatic stop scenario runs if nr aircraft is stable
Example: 'AUTOSTOP ON'

Argument	*Description*
ON	Activate autostop
OFF	Deactivate autostop

AUTOTAXLOG/AUTAXLOG

Arguments: OFF/(ON [filename])
Description: Switch datalogging on/off for Autonomous Taxi
Example: 'AUTOTAXLOG ON test.out'

Argument	*Description*
ON	Activate autonomous taxi logging
OFF	Deactivate autonomous taxi logging
Filename	Filename of output file

AVOIDREDCFL

Arguments: [ON/OFF]
Description: Avoid flying into a red (short time) conflict
Remark: Default AVOIDREDCFL is true but for bottleneck scenarios like the wall it is necessary to turn off red conflict avoidance
Example: 'AVOIDREDCFL': Toggles red conflict avoidance

Argument	*Description*
ON	Avoid red conflict (default)
OFF	Do not avoid red conflicts

AW

See ADDWPT

BANNERTXT/BANNERTEXT

Arguments: [ON/OFF][text]
Description: Switch to display banner information acros top of radar screen
Example: 'BANNERTXT ON Display this text'
Example: 'BANNERTXT OFF'

Argument	*Description*

ON	Turn banner text on
OFF	Turn banner text off
Text	Text to be displayed

BATCH

Arguments: option [arg]
Description: Batch simulation control
Example: 'BATCH FILE file1
Example: 'BATCH START'

Argument	*Description*
Option	'FILE' 'START' 'NEXT' 'STOP'
Arg	Argument for option

BGPASAS/BGPA/BGPREDASAS

Arguments: ON/OFF
Description: Turn ON/OFF conflict prevention for all equipped (see PREDASAS) aircraft
Example: 'BGPASAS ON'

Argument	*Description*
ON	Turn BGPASAS on
OFF	Turn BGPASAS off

BICCA/BI

Arguments: [id/*,]biccacode
Description: Set bicca code
Remark: With only the bicca code, TMX returns id and type
Example: 'BICCA 5499': TMX might return 'KL101 B744'

Argument	*Description*
id	Only apply to aircraft with this callsign
*	Apply to last created aircraft
Biccacode	Bicca code (?)

BOX

Arguments: label,lat0,lon0,lat1,lon1
Description: Draw box
Remark: Click on the radar-screen to obtain a corner point
Example: 'BOX TEST 52.7476 4.7567 53.9647 5.8588'

Argument	*Description*
label	Box object name (to be able to delete the object)
Lat0,lon0	Latitude & longitude corner point
Lat1,lon1	Latitude & longitude corner point

BP/BREAK/BREAKPOINT

Arguments: none

Description: For debug purposes prints: 'Set breakpoint at this line in source-code'

BYE

See EXIT

CA

See CLEARED

CALL

Arguments: filename[.scc]
Description: Call other scenario from a scenario
Example: ‘CALL next.scn’

Argument	*Description*
filename[.scc]	File name (extension not required)

CC

See CRECONF

CCC

Arguments: id/*/ALL [ON/OFF]
Description: Set aircraft continuous cruise climb on/off
Example: ‘CCC KL506’: Toggles continuous climb for this aircraft

Argument	*Description*
Id	Apply to this aircraft only
*/ALL	Apply to all aircraft
ON	Turn on continuous cruise climb
OFF	Turn off continuous cruise climb

CCS

See CRECONFS

CD

Arguments: acid/*/ALL, [ON/OFF]
Description: Set aircraft conflict detection ON/OFF
Remark: Not using a second argument will toggle the conflict detection ON/OFF
Example: ‘CD * OFF’

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
ON	Turn conflict detection ON
OFF	Turn conflict detection OFF

CD_IFR-IFR

Arguments: [ON/OFF]
Description: Flag to control IFR/IFR conflict detection
Example: ‘CD_IFR-IFR OFF’

Argument	*Description*
ON	Detect conflicts between IFR aircraft (default)
OFF	Do not detect conflicts between IFR aircraft

CHASE

Arguments: id, targetid, dtimesec
Description: Steer ownship aircraft into the direction of target aircraft
Example: 'CHASE BLUE1 RED1 600'

Argument	*Description*
Id	Identifier of ownship aircraft
Targetid	Identifier of target aircraft
dtimesec	Time in which distance should be closed

CHAT

Arguments: acid/*/ALL text
Description: Send text to online user
Remark: Only applicable for web/internet functionality
Example: 'CHAT * Session will end in 10 min'

Argument	*Description*
Acid	Aircraft identifier
*/ALL	Apply to all aircraft
Text	Free text

CHATMODE

Arguments: ALL/TMX/TOGGLE
Description: Chat to all participants or only to/from TMX
Remark: Only applicable for web/internet functionality
Example: 'CHATMODE ALL'

Argument	*Description*
ALL	Open chat to all participants
TMX	Allow chat only to/from TMX
TOGGLE	Toggles chat mode

CIRCLE

Arguments: label,(lat,lon | navid),radiusnm
Description: Draw circle
Remark: Click on the radar-screen to obtain the center point
Example: 'CIRCLE TEST KDFW 100.'

Argument	*Description*
label	Circle object name (to be able to delete the object)
Lat,lon	Latitude & longitude
navid	Navigation aid name (airport, NDB,VOR)
radiusnm	Circle radius in Nm

CLBSPD

Arguments: acid/*/ALL, [IAS/Mach/OFF]
Description: Select climb speed for VNAV climb, which overrides the BADA procedural speed
Remark: Used when there is no waypoint constraint speed and no manual override
Example: ‘CRZSPD KL101 0.83’

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
IAS	Indicated airspeed (kts)
Mach	Mach number (-)
OFF	No VNAV climb speed defined

CLEARANCE

Arguments: ACCEPT/REJECT/ON/OFF
Description: Master accept or reject ATC clearances switch (see REQ and CLR)
Example: ‘CLEARANCE ACCEPT’

Argument	*Description*
ACCEPT	Accept ATC clearances
REJECT	Reject ATC clearances
ON	Switch clearances on
OFF	Switch clearances off

CLEARED/CA

Arguments: acid, alt
Description: Clear aircraft to altitude
Example: ‘CA KL101 21000’

Argument	*Description*
Acid	Only apply to aircraft with this callsign
alt	Cleared altitude

CLOUD

Arguments: lat,lon
Description: Creates a single small cloud cell at given location
Example: ‘CLOUD 30.324,-120.896’

Argument	*Description*
Lat	Latitude point
Lon	Longitude point

CLR

Arguments: id,alt
Description: Clear aircraft to requested altitude
Example: ‘CLR KL101 21000’

Argument	*Description*
id	Only apply to aircraft with this callsign
Alt	Requested altitude

CLRAREA

Arguments: lata,lona,latb,lonb,[latc,lonc]/OFF
Description: Define area in which requests and clearances are given.
Example: 'CLRAREA 52.647,4.767, 51.853,4.1313'

Argument	*Description*
Lata	Latitude point a
Lona	Longitude point a
Latb	Latitude point b
Lonb	Longitude point b
OFF	Remove clearance area

COL/COLOR

Arguments: Acid/*/#, color
Description: Set aircraft color
Example: 'COL KL101 BLUE'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/#	Apply to last created aircraft
Color	Color (either int or text)

COM/COMM

See ETHERNET

CONFILT/CONFFILT

See FILTER

CONN

See ETHERNET

CORTE/CRTE

Arguments: acid, route_id
Description: Loads a predefined company route. See .\data\routes
Remark: Automatically sets trafcrte variable
Example: 'CORTE KL101 _BAMBE18R_ICKEL_CONVILS18R.RTE'

Argument	*Description*
Acid	Aircraft identified (max 8 char)
Route_id	Route identifier

CP

See PREDASAS

CPDLC

Arguments: id/*/ALL ,ON/OFF
Description: Equip aircraft with data-link communication equipment
Remark: NLR uses CPDLC command for MA-AFAS specific control
Example: 'CPDLC * ON'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
ON	Equip
OFF	Do not equip

CPDLCLOG

See MSGLOG

CRE

Arguments: ID/*, TYPE, LAT, LON, HDG[T/M], ALT, SPD[G], [CMDALT], [VS]
Description: Creates an aircraft at given location, heading and speed with the given command altitude and vertical speed
Remark: After creation the aircraft will immediately follow new guidance commands for heading, speed and altitude!
Example: 'CRE KL101 B744 50.34534 4.5665 90 10000 250'
Example: 'CRE AA303 A346 30.13564 -140.5665 320M FL250 400G'

Argument	*Description*
ID/*	Aircraft identified (max 8 char) or * for random selection
TYPE	Aircraft type (6 char ICAO descriptor)
LAT	Aircraft latitude (deg)
LON	Aircraft longitude (deg)
HDG[T/M]	Aircraft heading [True/Magnetic] (default is True) (deg)
ALT	Aircraft altitude (ft of FL)
SPD[G]	Aircraft speed (IAS or MACH) or groundspeed [G] (kts)
CMDALT	Aircraft commanded altitude (ft or FL)
VS	Aircraft vertical speed (ft/min)

CREATECONFLICT

See CRECONF

CRECONF

Arguments: targetid, intruder-id, expiretime, dalt, deltatime, waypoint
Description: Make aircraft intruder-id chase aircraft target-id to generate a conflict
Example: 'CRECONF KL101 KL200 600 500 500 SPY'

Argument	*Description*
Target-id	Id of aircraft with which a conflict will occur
Intruder-id	Id of intruding aircraft
Expiretime	Time after which the intruder aircraft will stop chasing (default = 0: don't stop until separation is zero)
Dalt	Altitude difference with respect to target aircraft

Deltatime	Time to first loss of separation [s] (default = -10)
Waypoint	Name or intersection number in route of target

CRECONFS

Arguments: id/*, type, targetid, dpsi, cpa, tlos_hor, dalt, tlos_ver, spd
Description: Creates a conflict with the target aircraft with specified parameters by creating an other aircraft and sending it into conflict
Example: 'CRECONFS KL101 B744 KL200 30 2 20 50 -100 250'

Argument	*Description*
Id/*	Aircraft id (* for random)
Type	Aircraft type (6 char ICAO descriptor)
Targetid	Id of aircraft with which a conflict will occur
Dpsi	Track offset frm target aircraft [deg]
Cpa	Closest point of approach when no-one maneuvers [nm]
Tlos_hor	Time to first horizontal los of separation [s]
Dalt	Altitude difference with respect to target aircraft
Tlos_ver	Time to first vertical los of separation [s]
Spd	Speed [KTAS]

CREFLIGHT/CF

Arguments: ID, TYPE, ORIG, DEST [,DEP-TIME, AC-MASS, CRZ-ALT, CRZ-SPD]
Description: Creates a planned flight in the flight queue
Remark: Flights created in the flight queue will be created in the simulation when the simulated UTC time reaches their departure times.
Example: 'CREFLIGHT KL101 B744 EHAM KJFK 72120 365000 34000 310'
Example: 'CF AA303 A346 KDFW KLAX 44566 355000 32000 0.85'

Argument	*Description*
ID	Aircraft identified (max 8 char)
TYPE	Aircraft type (6 char ICAO descriptor)
ORIG	Origin airport of flight
DEST	Destination airport of flight
DEP-TIME	Planned gate departure time (sec UTC)
AC-MASS	Aircraft mass (kg)
CRZ-ALT	Cruise altitude (ft)
CRZ-SPD	Cruise speed (IAS or MACH)

CRETCAS

Arguments: id/*, type, targetid, time,brg, dalt, vs, spd
Description: Creates a TCAS alert
Example: 'CRECONFS KL101 B744 KL200 30 253 -100 1500 250'

Argument	*Description*
Id/*	Aircraft id (* for random)
Type	Aircraft type (6 char ICAO descriptor)
Targetid	Id of aircraft with which a conflict will occur
Time	Time to conflict

Brg	Closest point of approach when no-one maneuvers [nm]
Dalt	Altitude difference with respect to target aircraft
Vs	Vertical speed [fpm]
Spd	Speed [KTAS]

CRETIME

Arguments: trafid time
Description: Set creation time (traftime0) to a specific value
Example: 'CRETIME KL575 01:03:00'
Example: 'CRETIME KL575 300'

Argument	*Description*
Trafid	Apply to this aircraft
Time	Time of creation in hh:mm:ss or seconds

CRLOG

See RESLOG

CRZALT/CRZ

Arguments: acid/*/ALL, [altitude/OPT/CSTR/OFF]
Description: Set cruise altitude or mode
Remark: Cruise mode determines aircraft vertical profile
Example: 'CRZALT KL101 FL360'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
altitude	Altitude (ft) or FL
OPT	Optimum cruise mode
CSTR	Constraint (use waypoint altitudes)
OFF	No cruise mode

CRZFFONLY

Arguments: [ON/OFF]
Description: Switch to inhibit climb and descent fuel flow (use cruise FF instead)
Example: 'CRZFFONLY': Toggles cruise FF use

Argument	*Description*
ON	Use cruise fuel flow numbers during a climb or descend
OFF	Default

CRZSPD

Arguments: acid/*/ALL, [spd/OFF]
Description: Set cruise speed for VNAV, which overrides the BADA procedural speed
Example: 'CRZSPD KL101 250'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft

spd	Cruise speed
OFF	Turns of manual cruise speed setting

CT

See CRETCAS

CTZONER

Arguments: val
Description: Change autonomous a/c conflict zone
Remark: CTZONER changes radius
Example: 'CTZONER 5.0': Use 5.0 Nm (radius) for the conflict zone.

Argument	*Description*
val	Value (nm or ft)

DARK/DC

Arguments: 0/1/2/OFF
Description: Set dark cockpit concept mode.
Example: 'DARK 2'

Argument	*Description*
0/OFF	OFF (show all aircraft on ND)
1	Show all conflicting and CP band causing aircraft
2	Show only conflicting aircraft

DATALOG

Arguments: OFF/(ON [filename])
Description: Open or close data logging file.
Remark: Data context is determined by project flag (see DATLOGTYP).
Example: 'DATALOG ON'

Argument	*Description*
ON	Turn on data logging
OFF	Turn off data logging
filename	User defined filename, otherwise scenario name will be used

DATLOGDT/DATALOGDT

Arguments: sec
Description: Sets data logging update rate for recurring data
Example: 'DATLOGDT 5': log recurring data once every 5 seconds

Argument	*Description*
sec	Log data once every *sec* seconds

DATLOGTYP/DATLOGTYPE

Arguments: # {0=DEF,1=AFM,2=APS,3=EOO}
Description: Sets project specific data logging flag
Example: 'DATLOGTYP 3': log EOO data

Argument	*Description*
#	Project identifier (int) [0=DEF, 1=AFM, 2=APS, 3=EOO]

DEFEND

Arguments: id, targetid
Description: Defend against target aircraft
Example: 'DEFEND NL007 US000'

Argument	*Description*
id	Apply only to this aircraft
targetid	Target aircraft call-sign

DEFLVL/DEFLEVEL

Arguments: dffaltitude
Description: Set Free Flight Level
Remark: Above this aircraft will use autonomous operations if layer control is active (see SWLAYER)
Example: 'FFLEVEL 18000'

Argument	*Description*
ffaltitude	Free Flight / Autonomous operations altitude (ft or FL)

DEFPOLY/DP

Arguments: label, lowalt,uppalt,lat0,lon0,lat1,lon1,…
Description: Create a generic polygon with an upper and lower altitude bound.
Remark: Click on the radar-screen to get the line segment points
Example: 'DP test 2000 45000 52.64654 2.4534 52.6545 2.6754645…..'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

DEFTRKSYS

Arguments: trackid
Description: Define track system with track id
Example: 'DEFTRKSYS TRKS1'

Argument	*Description*
trackid	Id to be assigned to track system

DEFTRKWPT

Arguments: trackid wpname
Description: Define track waypoint in tracksystem
Example: 'DEFTRKWPT TRKS1 SPY'

Argument	*Description*

trackid	Id of the track system to which waypoint is added
Wpname	Waypoint name

DEFWPT

Arguments: wpname, lat, lon
Description: Creates a user defined waypoint
Example: 'DEFWPT FRANK 30.324,-120.896'

Argument	*Description*
wpname	User defined waypoint name
Lat	Latitude point (deg)
Lon	Longitude point (deg)

DEL/DELETE

Arguments: acid/TURB/WIND/CLOUD/REPEAT/SCHED
Description: Delete aircraft or object
Example: 'DEL KL101': Delete aircraft KL101
Example: 'DEL WIND': Delete all wind

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
TURB	Turbulence
WIND	Wind
CLOUD	Clouds
REPEAT	Stop repeat of scheduled commands (see REPEAT)
SCHED	Stop repeat of scheduled commands (see REPEAT)

DELALT

Arguments: alt/OFF
Description: Set delete-altitude below which aircraft will be deleted.
Example: 'DELALT 5000'

Argument	*Description*
alt	Altitude [ft]
OFF	Turns mechanism off

DELCONF/DELETECONFLICT

Arguments: target-id, intruder-id
Description: Make aircraft intruder-id stop chasing aircraft target-id
Example: 'DELCONF KL200 KL102'

Argument	*Description*
Target-id	Id of target aircraft
Intruder-id	Id of intruder aircraft

DELFXWP

Arguments: ON/OFF/range
Description: Delete all waypoints that follow metering fix after Metering fix is defined in 'DEST' command.

Example: ‘DELFXWP 20’: Delete all additional waypoints from TMX metering fix to destination airport and all waypoints within a range of 20nm from metering fix.

Argument	*Description*
ON	Activate auto wpt deletion
OFF	Deactivate auto wpt deletion
Range	Use range (nm) to activate and delete all wpts within this range from the metering fix

DELINT

Arguments: [ON/OFF]
Description: Delete aircraft in INTENT scenarios that are outside RFS range and flying away.

Argument	*Description*
ON	Activate aircraft deletion
OFF	Deactivate aircraft deletion

DELRTE/DELROUTE

Arguments: acid/*/#
Description: Delete aircraft route
Example: ‘DELRTE KL101’

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/#	Apply to last created aircraft

DELWPT

Arguments: acid/*/#,wpname
Description: Delete waypoint from aircraft route
Example: ‘DELWPT KL101 URK’

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/#	Apply to last created aircraft
wpname	Waypoint name

DENSITY/DENS

Arguments: [polyid]
Description: Determine screen or polygon density
Example: ‘DENSITY’: Get screen density

Argument	*Description*
polyid	Polygon identifier

DESSPD

Arguments: acid/*/ALL [IAS/Mach/OFF]
Description: Select descend speed for VNAV descend, which overrides the BADA procedural speed

Remark: Used when there is no waypoint constraint speed and no manual override
Example: 'DESSPD KL101 300'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
IAS	Indicated airspeed (kts)
Mach	Mach number (-)
OFF	No VNAV descend speed defined

DEST

Arguments: acid/*/#, [airport/(lat,lon)/OFF]
Description: Return or set destination of aircraft
Example: 'DEST KL101'
Example: 'DEST KL101 KDFW'
Remark: The DEST command also adjusts the total fuel and mass of the aircraft!

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/#	Applicable to last created aircraft
Airport	Airport identifier
Lat	Latitude
Lon	Longitude
OFF	Removes destination

DETECT

See CD

DFFLEVEL/DFFLEV/DFFLVL

Arguments: dffaltitude
Description: Set delta Free Flight Level
Remark: Above this aircraft will use autonomous operations if layer control is active (see LAYCTRL)
Example: 'DFFLEVEL 1000'

Argument	*Description*
dffaltitude	Delta Free Flight / Autonomous operations altitude

DIRECT/DIRTO/DIRECTTO/D

Arguments: acid/*/#, wpname/wp#/(lat, lon)
Description: Lets the aircraft to go direct to the assigned waypoint
Remark: If a lat/lon is provided, a new waypoint will be created
Example: 'DIRECT KL100 52.654, 3.757': create a new waypoint and fly direct

Argument	*Description*
Acid	Apply to selected aircraft
*/#	Apply to last created aircraft
wpname	Waypoint name
Wp#	Waypoint number

Lat	Latitude point (deg)
Lon	Longitude point (deg)

DISC

Arguments: ID/*/ALL
Description: Disconnects aircraft from web session
Example: 'DISC KL101'

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft

DISPLAY/DISP

See SWRAD

DIST

See QTEDIST

DLLOG

See MSGLOG

DMZONER/DMZONEDH

Arguments: val
Description: Change managed a/c additional CD buffer
Remark: DMZONER adds buffer to radius while DMZONEDH add buffer to height.
Example: 'DMZONEDH 50': Add 50 ft to conflict detection half height

Argument	*Description*
val	Value (nm or ft)

DOWNLINK

Arguments: [id],[reply]
Description: Downlink to ATC (MA-AFAS only)
Remark: No actual functionality, just repeats on screen.
Example: 'DOWNLINK WILCO'

Argument	*Description*
id	Apply to this aircraft
WILCO	Will comply
UNABLE	Unable
STANDBY	Standby

DRAWF/DRAWFILT

Arguments: acid/*/ALL [ON/OFF]
Description: Draw filtered ADS-B data
Example: 'DRAWF ALL'

Argument	*Description*
acid	Apply to this aircraft only

*/ALL	Apply to all aircraft
ON	Draw filtered ADS-B data
OFF	No longer draw filtered ADS-B data

DRAWLOGO

See LOGO

DRAWPREP

Arguments: [ON/OFF]
Description: Draw oceanic position reports
Example: 'DRAWPREP'

Argument	*Description*
ON	Draw position reports
OFF	Do not draw position reports

DRAWRTE

Arguments: route_id/*/ALL [ON/OFF]
Description: Draw predefined route. See .\data\routes
Example: 'DRAWRTE ALL OFF'

Argument	*Description*
Route_id	Route identifier
*/ALL	Apply to all previously loaded routes
ON	Draw route
OFF	No longer draw route

DRAWTAXIPZ

See SWDRAWTAXIPZ

DRAWTXT / DRAWTEXT

See SWTXT

DRAWU/DRAWUNF/DRAWUNFILT/DRAWUF

Arguments: acid/*/ALL [ON/OFF]
Description: Draw unfiltered ADS-B data
Example: 'DRAWUF * ON'

Argument	*Description*
acid	Apply to this aircraft only
*/ALL	Apply to all aircraft
ON	Draw unfiltered ADS-B data
OFF	No longer draw unfiltered ADS-B data

DT

Arguments: timestep
Description: Set simulation integration step time (see FF)
Example: 'DT 0.25': run TMX at 4 hz

Argument	*Description*
timestep	Time step in seconds (0.1 = 10 Hz)

DTAMBER

Arguments: time
Description: Set amber conflict look ahead time
Example: ‘DTAMBER 300’

Argument	*Description*
time	Look-ahead time

DTBLUNDR

Arguments: time
Description: Set look ahead time for blunder protection (state CD&R during Intent)
Example: ‘DTBLUNDR 10’

Argument	*Description*
Time	Look ahead time in seconds

DTCPAMBER

Arguments: time
Description: Set CP band amber look ahead time
Example: ‘DTCPAMBER 300’

Argument	*Description*
time	Look-ahead time

DTCPCYAN

Arguments: time
Description: Set cyan band look ahead time
Example: ‘DTCPCYAN 600’

Argument	*Description*
time	Look-ahead time

DTCPRED

Arguments: time
Description: Set CP band red look ahead time
Example: ‘DTCPRED 120’

Argument	*Description*
time	Look-ahead time

DTCPSUA

See DTSUA

DTCPWX

See DTWX

DTCYAN

Arguments: time
Description: Set cyan conflict look ahead time
Example: ‘DTCYAN 600’

Argument	*Description*
time	Look-ahead time

DTLOG

See TRAFLOGDT

DTLOOK

Arguments: time
Description: Set look ahead time for State based conflict detection
Example: ‘DTLOOK 300’

Argument	*Description*
Time	Look-ahead time [sec]

DTLOOKATC/DTLOKATC

Arguments: time
Description: Set look ahead time for ATC conflict detection
Remark: ATC used the same CD&R algorithm but with a longer look ahead time
Example: ‘DTLOOKATC 600’

Argument	*Description*
Time	Look-ahead time [sec]

DTLOOKINT

Arguments: time
Description: Set look ahead time for Intent based conflict detection
Example: ‘DTLOOK 300’

Argument	*Description*
Time	Look-ahead time [sec]

DTNOLOOK

Arguments: time
Description: Set conflict probe interval time
Example: ‘DTNOLOOK 300’

Argument	*Description*
Time	Probe interval time [sec]

DTREACT

Arguments: [ULTR/FAST/NORM/SLOW/STOP], sec
Description: Set pilot model random delta on reaction delay time (see treact)
Remark: Not adding a mode will imply all modes. Master RND mode has to be active (see .\data\config.dat)

Example: ‘TREACT FAST 5’: a random delta of +/- 5 sec on fast reaction time.

Argument	*Description*
ULTR	Setting for ultra fast reactions
FAST	Setting for fast reactions
NORM	Setting for normal reactions
SLOW	Setting for slow reactions
STOP	Setting for very slow reactions
sec	Delta reaction time [sec]

DTREACTNO/DTNOREACT

Arguments: sec
Description: Set delta on reaction to no longer in conflict (see TREACTNO)
Remark: Master RDM switch has to be active.
Example: ‘DTREACTNO 5’: delta on TREACTNO of +/- 5 sec

Argument	*Description*
sec	Delta on reaction time [sec]

DTREC

See TRAFRECDT

DTRED

Arguments: time
Description: Set red conflict look ahead time
Example: ‘DTRED 120’

Argument	*Description*
time	Look-ahead time

DTRESO

Arguments: sec
Description: Set interval time as how often to invoke resolution algorithm
Example: ‘DTRESO 2’: execute resolution once every 2 seconds

Argument	*Description*
Sec	Interval [sec]

DTS

See DEFTRKSYS

DTSUA

Arguments: time
Description: Set special use airspace look ahead time
Example: ‘DTSUA 600’

Argument	*Description*
time	Look-ahead time

DTVALIDINT

Arguments: time
Description: Set time for intent resolution to be valid in order to be accepted
Example: ‘DTVALIDINT 600’

Argument	*Description*
Time	Look-ahead time [sec] (normally double the look-ahead)

DTW

See DEFTRKWPT

DTWX

Arguments: time
Description: Set weather look ahead time
Example: ‘DTWX 600’

Argument	*Description*
time	Look-ahead time

DYNADENS

Arguments: [acid]
Description: Give dynamic density of window/RFS acc INTENT metrics
Example: ‘DYNADENS’: Will give dynamic density of RFS

Argument	*Description*
Acid	Apply only to this aircraft

DZONER/DZONEDH

Arguments: val
Description: Change autonomous a/c additional CD buffer
Remark: DZONER adds buffer to radius while DZONEDH add buffer to height.
Example: ‘DZONER 0.1’: Add 0.1 Nm to radius of conflict detection zone.

Argument	*Description*
val	Value (nm or ft)

EC

See EXPCONF

ECHO

Arguments: [ON/OFF]
Description: Set echo commands to the command window or view current setting

Argument	*Description*
ON	Turn echo on
OFF	Turn echo off

EDITMODE

Arguments: ON/OFF
Description: Activate or Deactivate Edit Mode (not used)

Argument	*Description*
ON	Turn edit mode on
OFF	Turn edit mode off

ENTRY

Arguments: label,(lat,lon | navid),radiusnm,[minalt,maxalt, speed],entry_track
Description: Creates a startpoint for auto starting the scenario
Example: 'ENTRY start URK 10 15': Aircraft flying into the polygon that is created at navaid URK with radius 10Nm and with a course of 15 deg will start the scenario.

Argument	*Description*
label	Polygon label
La,lon	Latitude, longitude
navid	Navaid (VOR, NDB, Airport)
radiusnm	Radius (nm)
minalt	Minimum altitude
Maxalt	Maximum altitude
Speed	Required speed
Entry_track	Required entry track

EQP/EQUIP

See ASAS

ESCSCEN/ESCAPESCEN

Arguments: file/OFF
Description: Open and activate ESCAPE traffic scenario
Example: 'ESCCEN file.txt'

Argument	*Description*
file	ESCAPE traffic scenario
OFF	Turn off ESCSCEN

ETH/ETHERNET

Arguments: */ALL/connection ON/OFF
Description: Switch Ethernet communication on/off
Remark: Preferred way is to activate the Ethernet master switch (ethon) in config.dat and use the ethconf.dat file to set the Ethernet connections
Example: 'ETH MEID ON': Turn on MEID Ethernet communication

Argument	*Description*
*/ALL	Apply to all connections
connection	'MASTER' 'RFS'

	‘RFS_FMS’	‘RFS_EXTASAS’
	‘RFS_VIS’	‘MCS’
	‘MCS_FMS’	‘MCS_EXTASAS’
	‘MCS_VIS’	‘MEID’
	‘TOMEID’	‘FROMMEID’
	'ADS-B'	‘ATC'
	'CMD'	‘SCTRL'
	'LOGG'	‘WV'
	'FAST'	‘X-PL'
	'PSDO'	‘WEB’
	‘INTERNET'	‘NET’
	‘REC'	‘RECORD’
	‘PLAY'	‘PB’
	‘PLAYBACK'	‘TMX2GUI’
	‘WAKEV’	‘SMGCS’
	‘SCENCTRL’	‘TMX2STOPBAR’
ON	Activate connection	
OFF	Deactivate connection	

EVE/EVENT

Arguments: RFS/HOST0/{MCS/HOST# acid/*/ALL} eventnr
Description: Event handling
Example: ‘EVE * 25’: Set conflict detection failure event to all aircraft

Argument	*Description*
RFS/HOST0	Research Flight Simulator
MCS	Multi Cockpit Simulator (any other external sim.)
acid	Aircraft identifier
*/ALL	All aircraft
eventnr	Event number (int)

EXECUTE

See SEMIAUTO

EXIT

Arguments: none
Description: Write final statistics, close files, close external connections and end the execution

EXITALT/EXITALTITUDE

Arguments: trafid, [alt]
Description: Set maximum altitude
Example: ‘EXITALT KL304 FL300’: Let KL304 disappear when it reaches FL300

Argument	*Description*
Trafid	Apply to this aircraft
Alt	Maximum altitude (ft or FL)

EXP

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create an experiment sector polygon or redefine existing polygon
Remark: Click on the radar-screen to get the line segment points.
Example: 'EXP ZFW': Redine ZFW polygon into an experiment area

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

EXPCONF/EXPIRECONFLICT

Arguments: target-id, intruder-id, [expire-time]
Description: Make aircraft intruder-id stop chasing aircraft target-id after specified time
Example: 'EXPCONF KL200 KL102'

Argument	*Description*
Target-id	Id of target aircraft
Intruder-id	Id of intruder aircraft
Expire-time	Time after which intruder aircraft should stop chasing [s]

F

See ATCFREQ

FAST

Arguments: [ON/OFF]
Description: Project functionality switch, FAST project
Example: 'FAST ON'

Argument	*Description*
ON	Use FAST functionality
OFF	Do not use FAST functionality

FF/FWD

Arguments: [hh:mm:ss]
Description: Switch TMX to fast-time operation with fixed dt (see DT)
Remark: Time argument will cause TMX to stop at given time
Remark: Not available in RFS/MCS/ATC/WEB
Example: 'FF 00:10:00'

Argument	*Description*
hh:mm:ss	Stop time

FFLEVEL/FFLEV/FFLVL

Arguments: ffaltitude
Description: Set Free Flight Level
Remark: Above this aircraft will use autonomous operations if layer control is active (see SWLAYER)

Example: ‘FFLEVEL 18000’

Argument	*Description*
ffaltitude	Free Flight / Autonomous operations altitude (ft or FL)

FILTAMB/FILTTAMB

Arguments: sec
Description: Set filter time for AMBER conflicts. Amber conflicts have to last at least *sec* seconds to be logged
Example: ‘FILTAMB 10’

Argument	*Description*
sec	Filter time in seconds

FILTCONF/FILTER/FILT

Arguments: ON/OFF/TOGGLE
Description: Use conflict filtering (see FILTRED & FILTAMB)
Example: ‘FILTCONF ON’

Argument	*Description*
ON	Use conflict filter
OFF	Stop using conflict filter
TOGGLE	Toggles conflict filter on/off

FILTRED/FILTTRED

Arguments: sec
Description: Set filter time for RED conflicts. Red conflicts have to last at least *sec* seconds to be logged
Example: ‘FILTRED 4’

Argument	*Description*
sec	Filter time in seconds

FIXDT

Arguments: ON/OFF [hh:mm:ss]
Description: Use a fixed step time instead of real time operation (see DT)
Remark: Additional time argument to stop fix time step operation
Example: ‘FIXDT ON 00:30:00’: run for 30 min with a fixed time step

Argument	*Description*
ON	Use fix time step
OFF	Stop using fix time step
Hh:mm:ss	Stop time

FMS

Arguments: acid/*/ALL [0=SMITHS/1=HONEYWELL]
Description: Turn on LNAV, VNAV and SNAV mode.
Example: ‘FMS KL101’

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Apply to all aircraft
0/1	Optional to set climb/descent behavior to SMITHS FMS or HONEYWELL FMS

FMSSPD

See SWFMSSPD

FOLLOW

Arguments: id/*/#, target/OFF, (separation SEC/NM)
Description: Aircraft will follow target with a fixed separation
Example: 'FOLLOW # KL301 6'

Argument	*Description*
Id	Apply to this aircraft only
*/#	Apply to last created aircraft
Target	Id of target aircraft
OFF	Turn following off
Separation	Separation between two aircraft in seconds or nm

FONT

Arguments: S[MALL] / M[EDIUM] / B[IG] / L[ARGE}
Description: Set font size
Example: 'FONT LARGE'

Argument	*Description*
Small	Small size font
Medium	Medium size font
Big	Big size font
Large	Large size font

FSTLOGDT

Arguments: sec
Description: Set the increase traffic parameter logging update rate for events
Example: 'FSTLOGDT 1': Log traffic parameters at 1HZ in case of conflict

Argument	*Description*
sec	Log aircraft parameters once every *sec* seconds

FSTRECDT

Arguments: sec
Description: Set the increase traffic parameter recording update rate for events
Example: 'FSTRECDT 1': Record traffic parameters at 1HZ in case of conflict

Argument	*Description*
sec	Record aircraft parameters once every *sec* seconds

FREEZE

See HOLD

FREQ

Arguments: none
Description: Displays current execution frequency.

FULLAUTO

Arguments: none
Description: Sets reso mode for RFS to full automatic

GAIN

See WXGAIN

GBT

Arguments: id/*/ALL/DEF/DEFAULT [UPDATE/UPD/RANGE/RNG/ERROR/ERR [parameter][value]]
Description: Create ground based transmitter station, which includes radar
Example: 'GBT EHAM': Create a ground based transmitter station at EHAM
Example: 'GBT EHAM ERR TRK 0.5': Set error on track signal of 0.5 deg.

Argument	*Description*
id	Airport identifier
*/ALL	All GBT stations
DEFAULT/DEF	Parameter to change default settings
UPDATE/UPD	Parameter to set radar update [ON,OFF,NONE,rate]
RANGE/RNG	Parameter to set radar range [nm]
ERROR/ERR	Parameter to set radar errors [ON,OFF,NONE,LAT,LON,ALT,SPD,TRK,VS,DROP]
Value	Value for update rate, range, lat/lon, alt, spd, trk, vs or drop rate.

GETPWIND/GETPWND

Arguments: lat,lon,alt
Description: Retrieve predicted wind information at given point
Example: 'GETPWIND 30.324,-120.896 10000'

Argument	*Description*
Lat	Latitude (deg)
Lon	Longitude (deg)
Alt	Altitude

GETWIND/GETWND

Arguments: lat,lon,alt
Description: Retrieve 'truth' wind information at given point
Example: 'GETWIND 30.324,-120.896 10000'

Argument	*Description*
Lat	Latitude (deg)

Lon	Longitude (deg)
Alt	Altitude

GETWINDPROFILE

Arguments: lat,lon,alt1,alt2
Description: Retrieve 'truth' wind profile at given point between two altitudes
Example: 'GETWINDPROFILE 30.324,-120.896 10000 15000'

Argument	*Description*
Lat	Latitude (deg)
Lon	Longitude (deg)
Alt1	Lower altitude
Alt2	Upper alititude

GIVE

Arguments: acid/*/ALL
Description: Release one or all aircraft back to TMX
Example: 'GIVE *': Release all external aircraft back to TMX

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	All aircraft

GIVE_TAKE_POLY

See GT

GOTO

Arguments: scenfile
Description: Open a new scenario file as part of the scenario
Example: 'GOTO Test2.scn'

Argument	*Description*
scenfile	Scenario file name

GRAB

Arguments: filename
Description: Take screenshot and save to output file (BMP)
Example: 'GRAB Test': Take screenshot and saves to 'Test.bmp'

Argument	*Description*
filename	Output BMP file

GSANGLE/GSANG

Arguments: angle
Description: Set glide slope angle variable
Example: 'GSANGLE 3.0'

Argument	*Description*
angle	Glide Slope angle (deg)

GT

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create a GIVE/TAKE polygon or redefine polygon to GT
Remark: Click on the radar-screen to get the line segment points.
Example: 'GT usaf1 0000 10000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

HC

See HOSTCTRL

HDG/H

Arguments: acid/*, hdg/angle[T/M]
Description: Manual override heading/track/direction of aircraft
Remark: Manual override will turn off LNAV
Example: 'HDG KL101 78M': Select heading of 78 deg. magnetic

Argument	*Description*
Acid	Only apply to aircraft with this callsign
Hdg/angle	Heading or angle (deg) [True/Magnetic]

HDGH/HHOLD/HDGHOLD/HH

Arguments: acid/*/ALL
Description: Heading hold mode
Example: 'HHOLD KL101'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft

HDGREF

Arguments: T/M
Description: Set heading reference to TRUE or MAGNETIC
Example: 'HDGREF M' Use magnetic heading references

Argument	*Description*
T	True heading
M	Magnetic heading

HMETH/HRESOM/HRESOMETH

Arguments: meth
Description: Sets horizontal resolution method used by MVP and KB3D
Example: 'HMETH CPA10' Use CPA method with max 10 kts speed reso.

Argument	*Description*
Meth	CPA = closest point of approach CPAnn = CPA with max nn speed BOTH = BOTHnn = ALL = HDG = heading only SPD = speed only SPDnn = speed only with max nn NONE = no horizontal resolution method DISP = only to display

HOLD

Arguments: none
Description: Holds/Pauses execution of scenario

HOSTCTRL

Arguments: [host] option [arg]
Description: HOST simulator control
Example: 'HOSTCTRL OP'
Example: 'HC SPD ON

Argument	*Description*
Host	Id of host
Option	Without argument: 'IC' 'OP' 'HOLD' 'STOP' 'RESET' With arguments: 'MIC' 'SPD' 'HDG' 'ALT' 'V/S'
Arg	Argument for option

HOSTID

Arguments: host_id
Description: Set host_id
Example: 'HOSTID 2'

Argument	*Description*
Host_id	Id of host

HOVERX

Arguments: [fr] type | [fr] ALT alt | [fr] (CFAC,DFAC) x (0.0<=x<=1.0)
Description: Set height over distance variable, used in the calculation of Trajectory Change Points. This setting controls climb and descend angle in FMS trajectory.
Example: 'HOVERX AFR 0' All AFR aircraft will use CFAC & DFAC settings

Argument	*Description*
fr	Flight rules (VFR, IFR, AFR). If omitted all FR will be changed
type	0 = use default CFAC & DFAC settings 1 = use waypoint constraint if applied 2 = use waypoint constraint if lower than default 3 = use waypoint constraint if higher than default 4 = use default until ALT and then use wpt contraints
ALT	Parameter to set switch altitude
alt	Switch altitude below which wpt constraints should be used
CFAC	Climb factor (% of BADA calculated angle)
DFAC	Descend factor (% of BADA calculated angle)
x	Factor (0.0<=x<=1.0) 1.0 = 100% = idle descend or full throttle climb

HRFAC/HRESOFAC

See RFACH

IAS2TAS

Arguments: ias, alt
Description: Convert Indicated Airspeed to True Airspeed.
Example: 'IAS2TAS 290 30000'

Argument	*Description*
ias	Indicated Airspeed (kts)
Alt	Altitude (ft or FL)

IC

Arguments: [input-file/*]
Description: Reset current scenario (no argument) or reset to new scenario
Example: 'IC *': Reset TMX and load input screen for user to select new input file.

Argument	*Description*
Input-file	Scenario name
*	Reset and show input screen

INCLUDE

See CALL

INFO

Arguments: none
Description: Provides information on version and other main parameters
Example:

```
Version        : v10.0.09
Config         : NLR
Database       : worldnav
Max aircraft   : 1000
Max ext host   : 100
```

INPOLY

Arguments: lat,lon,label
Description: Checks whether point is inside polygon
Example: 'INPOLY 30.324,-120.896 zfw'

Argument	*Description*
Lat	Latitude (deg)
Lon	Longitude (deg)
Label	Polygon label

INSEDIT

Arguments: text
Description: Get text after command and insert as via keyboard

INSEXP

Arguments: lat,lon,alt
Description: Checks whether point is inside experiment area
Example: 'INSEXP 30.324,-120.896 10000'

Argument	*Description*
Lat	Latitude (deg)
Lon	Longitude (deg)
Alt	Altitude (ft)

INTLOG/INTRULOG/INTRLOG

Arguments: OFF/(ON [filename])
Description: Open or close Loss of Separation / Intrusions logging file.
Remark: If INTLOG is not used, intrusions will be logged in default intru.dat.
Example: 'INTLOG my_intrusions.txt'

Argument	*Description*
ON	Turn on intrusion logging
OFF	Turn off intrusion logging
filename	User defined filename, otherwise scenario name will be used

ITP

Arguments: id/*/ALL,ON/OFF
Description: Equip aircraft with In-Trail Procedure system
Example: 'ITP KL101 ON'

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
ON	Turn ITP on
OFF	Turn ITP off

KILL

See DISC

L

See LNAV

LABEL/LABLE/LB/LAB

Arguments: acid/*/ALL, OFF/TOGGLE/[number]/+/-
Description: Cycle aircraft label information
Example: 'LABEL * OFF': Turn labels for all aircraft off
Example: 'LABEL KL101': Cycle label for KL101

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
OFF	Turn off label
TOGGLE	Cycle through label information
[number]	Set the information level number of the aircraft label

LAYCTRL

See SWLAYER

LEFT

See HDG

LIMPERF/LIMITPERF

Arguments: [clb,des] ON/OFF
Description: Limit climb and or descent performance
Example: 'LIMPERF OFF': Do not limit climb and descend performance

Argument	*Description*
clb	Parameter to adjust climb performance only
Des	Parameter to adjust descend performance only
ON	Use BADA performance limits
OFF	Do not use BADA performance limits

LINE

Arguments: label,lat0,lon0,lat1,lon1
Description: Draw line
Remark: Click on the radar-screen to obtain a start and end point
Example: 'LINE TEST 52.7476 4.7567 53.9647 5.8588'

Argument	*Description*
label	Line object name (to be able to delete the object)
Lat0,lon0	Latitude & longitude start point
Lat1,lon1	Latitude & longitude end point

LINEPOLY

Arguments: acid,polylabel
Description: Debug statement to check linepoly subroutine
Example: 'LINEPOLY KL101 ZFW'

Argument	*Description*
acid	Use this aircraft
polylabel	Polygon object name

LISTMRTE

Arguments: acid,#[,pagenr]
Description: List all waypoints + constraints of aircraft modified route
Example: 'LISTRTE KL101 2': list page 2 of all waypoints in route

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
#	Route number
pagenr	Page number

LISTRTA/LRTA

Arguments: airport
Description: List all TMX defined metering fix RTA's
Remark: Only applicable to TMX metering fix
Example: 'LISTRTA KDFW'

Argument	*Description*
Airport	Airport identifier

LISTRTE

Arguments: acid[,pagenr]
Description: List all waypoints + constraints of aircraft active route
Example: 'LISTRTE KL101 2': list page 2 of all waypoints in route

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
pagenr	Page number

LISTWPT/LISTWP

Arguments: nr
Description: List user defined waypoint (see DEFWPT)
Example: 'LISTWPT 5'

Argument	*Description*
nr	Number of waypoints in list

LLCONV

Arguments: [lat/lon] / [deg,min,sec]
Description: Convert lat/lon to degrees minutes and seconds or vise versa
Example: 'LLCONV 52.75467 2.74574'

Argument	*Description*
Lat/lon	Latitude / Longitude in degrees
Deg	Degrees
Min	Minutes

Sec	Seconds

LNAV

Arguments: acid/*/ALL, ON/OFF/TOGGLE
Description: Turn ON/OFF LNAV guidance
Example: 'LNAV * ON'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
ON	Turn LNAV on
OFF	Turn LNAV off
TOGGLE	Toggles LNAV on/off

LOADFLIGHTS/LOADFL

Arguments: filename / (FILTER [AIRP/MASK/RWYLEN] value)
Description: Load traffic sample flights into flight queue, with possible filter options on the airport ID.
Example: 'LOADFLIGHTS SAMPLE.CSV'
Example: 'LOADFLIGHTS FILTER AIRP KSFO'
Example: 'LOADFLIGHTS FILTER MASK K'
Example: 'LOADFLIGHTS FILTER RWYLEN 9300'

Argument	*Description*
filename	Filename of traffic sample file (.CSV) TSAM format
FILTER	Set different filter options to filter airports from samples
AIRP	Add airport ID to the airport filter list
MASK	Set the airport ID mask for the airport filter
RWYLEN	Set the airport minimum required runway length in feet for the airport filter

LOADNAV

See NAVDB

LOCATE

Arguments: acid, tmx#
Description: Command to locate an aircraft on a specific TMX station
Example: 'LOCATE KL304 5'

Argument	*Description*
Acid	Aircraft id that has to be located
Tmx#	TMX station

LOCKFRQ

Arguments: OFF/(ON [freq])
Description: Set TMX frequency lock on/off
Example: 'LOCKFRQ ON': Locks TMX frequency at 10 Hz

Argument	*Description*

Freq	TMX frequency in Hz

LOG

Arguments: string
Description: Log string to data file
Example: 'LOG Pilot activated LNAV'

Argument	*Description*
string	Provided text string

LOGALT

Arguments: minalt maxalt
Description: Restricted altitudes for data logging. Do not log data if aircraft beyond these altitude restrictions
Example: 'LOGALT 10000 50000'

Argument	*Description*
minalt	Minimum altitude
Maxalt	Maximum altitude

LOGDT

See TRAFLOGDT

LOGNAV

Arguments: none
Description: Records specific nav data
Remark: Purely for temporary use to filter out some waypoints

LOGO

Arguments: [ON/OFF]
Description: Draw logo on radar-screen
Example: 'LOGO ON'

Argument	*Description*
ON	Draw logo
OFF	Do not draw logo

LOGPOLDNS/LOGPOLDENS

Arguments: [ON/OFF]
Description: Turn ON/OFF sector polygon density logging
Remark: Only for DATLOGTYP 1
Example: 'LOGPOLDNS ON'

Argument	*Description*
ON	Log sector polygon density
OFF	Do not log sector polygon density

LOGSTATE

Arguments: id

Description: Log the state of aircraft id
Example: ‘LOGSTATE KL101’

Argument	*Description*
Id	Aircraft identifier

LOGTYP/LOGTYPE

See DATLOGTYPE

LOOKRANGE

Arguments: range
Description: Only send traffic within this range of RFS if not ND range.
Example: ‘LOOKRANGE 200’

Argument	*Description*
Range	Range [Nm]

LOWALT

See SWLOWALT

MANUAL

Arguments: none
Description: Sets reso mode for RFS to manual

MASS

Arguments: trafid klbs/(kg KG)/(ton TON)
Description: Set aircraft mass in 1000 pounds, kilograms or tons
Remark: Use MASS after DEST command. DEST updates mass automatically
Example: ‘MASS KL101 50000 KG’

Argument	*Description*
trafid	Apply only to this aircraft
klbs	Mass in 1000 lbs
Kg	Mass in kg
Ton	Mass in tons

MASTER

Arguments: ON/OFF
Description: Switch TMX to master (ON) or slave (OFF) mode
Remark: TMX needs to be in slave mode for ATOL
Example: ‘MASTER ON’

Argument	*Description*
ON	TMX is master / controls simulation modes
OFF	TMX is slave / does not control simulation modes

MAXTAXISPEED

See TAXIMAXSPEED

MCRE

Arguments: n, type/*, alt/*, spd/*, dest/*
Description: Creates n aircraft within the view of the radar screen of given type, altitude, speed and destination.
Remark: Individual aircraft are created with CRE command (see CRE)
Example: 'CRE 10 * * * *': Create 10 aircraft with random parameters

Argument	*Description*
N	Number of aircraft to be created
TYPE/*	Specific type or random (*)
ALT/*	Specific altitude or random (*)
SPD/*	Specific speed or random (*)
DEST/*	Specific destination or random (*)

MCSGIVE

See GIVE

MCSTAKE

See TAKE

MCSRETAKE

See RETAKE

MDEL

Arguments: lat1, lon1, lat2, lon2
Description: Delete all aircraft within specified lat/lon coordinates
Remark: Lat/lon coordinates can be selected by clicking on the radar screen
Example: 'MDEL 50.34534,4.5665,51.564534, 5.5665'

Argument	*Description*
Lat1	Latitude 1 (deg)
Lon1	Longitude 1 (deg)
Lat2	Latitude 2 (deg)
Lon2	Longitude 2 (deg)

MEID

Arguments: OWNSHIP ON/OFF | COLOR FRIEND/FOE/NEUTRAL value | EXPIRE [value]
Description: Connection parameters for MEID (?)
Example: 'MEID COLOR FOE red': Color all foes red

Argument	*Description*
OWNSHIP	Use ownship (ON) or do not use ownship data (OFF)
COLOR	Set color for FRIEND, FOE or NEUTRAL
EXPIRE	Meid expire time (?)
value	Color or expiration time

METHH

See HMETH

METHV

See VMETH

MISSION

Arguments: acid/*/#,string
Description: Set mission string
Example: 'MISSION KL101 CAP'

Argument	*Description*
Acid	Apply only to this aircraft
*/#	Apply to last created aircraft
string	Free text string

MODACC/MODRJC

Arguments: acid/*/ALL
Description: Accept/Reject modified route. Accept will copy the route to active route, reject will delete the modified route (see MODRTE)
Example: 'MODACC KL101'

Argument	*Description*
Acid	Apply only to this aircraft
*	All aircraft

MODE

Arguments: [mode]
Description: Changes lower button row to select new mode and initialize button state. If no mode is chosen, the mode next in sequence is selected.

MODRTE

Arguments: acid
Description: Create a modified route
Example: 'MODRTE KL101'

Argument	*Description*
Acid	Apply only to this aircraft

MOVE

Arguments: acid, lat, lon [,alt][,hdg][,gspd][,vs,refalt]
Description: Moves aircraft to a different location and/or state
Example: 'MOVE KL101 50.34534 4.5665 12000'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
lat	New latitude (deg)
lon	New longitude (deg)
alt	New altitude (ft)
hdg	New heading
gspd	New groundspeed (kts)
vs	Vertical Speed to reference altitude (fpm)

refalt	Reference/Commanded altitude (ft)

MOVELABEL/MOVELBL

Arguments: acid lat,lon
Description: Move aircraft information label to new location
Example: MOVELBL KL101 52.673465 2.6457'

Argument	*Description*
Acid	Apply only to this aircraft
Lat,lon	Latitude, longitude

MOVEWPT/MOVEWP

Arguments: acid, wpname, wplat, wplon, [wpalt] ,[wpspd]
Description: Moves a waypoint in the aircraft route to a new location with optinal altitude and speed restriction
Example: 'MOVEWP KL102 ARTIP 52.023 5.502 FL100 250'

Argument	*Description*
Acid	Apply to this aircraft
Wpname	Waypoint name
Wplat	Waypoint latitude (deg)
Wplon	Waypoint longitude (deg)
Wpalt	Altitude restriction at waypoint (ft/FL)
Wpspd	Speed restriction at waypoint (kts)

MOVIE/MOV

Arguments: (START, filename, lat0,lon0,lat1,lon1[,dtsample]) / STOP
Description: Creates individual BMP files at dtsample rate which can be combined to create a animated GIF or other file format movie
Example: 'MOVE Test 50.34534 4.5665 52.65674 4.12665 2'

Argument	*Description*
filename	File name
Lat0	Corner 1 latitude
Lon0	Corner 1 latitude
Lat1	Corner 2 latitude
Lon1	Corner 2 latitude
dtsample	Time delta between screenshots

MROUTE/MR

Arguments: acid,#/ALL/*,ON/OFF/TOGGLE
Description: Show or hide modified route
Example: 'MROUTE KL101 2 ON': second route is shown

Argument	*Description*
Acid	Aircraft identifier
#	Specific modified route
ALL/*	All modified routes
ON	Show route

OFF	Hide route
TOGGLE	Toggle Show/Hide

MRSZONER/MRSZONEDH

Arguments: val
Description: Change managed a/c resolution zone
Remark: MRSZONER changes radius while MRSZONEDH changes height.
Example: 'MRSZONER 7.1': Use 7.1 Nm (radius) for conflict resolution.

Argument	*Description*
val	Value (nm or ft)

MSGLOG

Arguments: OFF/(ON [filename])
Description: Open or close CPDLC messages logging file.
Example: 'MSGLOG ON'

Argument	*Description*
ON	Turn on data logging
OFF	Turn off data logging
filename	User defined filename, otherwise scenario name will be used

MTS

See TAXIMAXSPEED

MW

See MOVEWPT

MZONER/MZONEDH

Arguments: val
Description: Change managed a/c protected zone
Remark: MZONER changes radius while MZONEDH changes height.
Example: 'MZONER 7.0': Use 7.0 Nm (radius) for the protected zone.

Argument	*Description*
val	Value (nm or ft)

NASAS

Arguments: commands…
Description: Non-ASAS data-link uplink from ATC
Remark: NASAS is used by NLR for MA-AFAS project
Example: 'NASAS CLRD': Cleared for STAR or ILS approach

Argument	*Description*
Commands	MA-AFAS data-link command

NAVID/NAVAID

Arguments: id

Description: Retrieve information of navigation aid
Example: ‘NAVAID KDFW’

Argument	*Description*
id	Navaid id (VOR, NDB, Airport)

NAVDB

Arguments: area_database
Description: Load new navigation database
Example: ‘NAVDB WORLDNAV’

Argument	*Description*
area	Navigation data base (see .\data\navdata)

NAVDISP/ND/NAV

Arguments: acid/*/#
Description: Switch to Navigation Display
Example: ‘ND KL101’

Argument	*Description*
acid	Apply to this aircraft
*/#	Apply to last created aircraft

NAVDT/NDT

Arguments: rate
Description: Set navigation display refresh rate
Example: ‘NAVDT 1’ Update navigation display once every 1 sec

Argument	*Description*
rate	Update rate (sec)

NAVTYPE/NDTYPE/NAVTYP/NDTYP

Arguments: type
Description: Show vertical/profile navigation display in normal or ITP mode
Example: ‘NAVTYP 1’

Argument	*Description*
type	Navigation display type [0=default,1=ITP]

NDB/NDBINFO

Arguments: ndbid
Description: Retrieve information of NDB
Example: ‘NDB URK’

Argument	*Description*
ndbid	NDB identifier

NLOOK/NDTLOOK <not used>

Arguments: x

Description: Number of step in which to look ahead.
Example: ‘NLOOK 60’

Argument	*Description*
x	Number of steps (int)

NLRPASAS

See SWNLRPASAS

NOISE

Arguments: ON/OFF/TOGGLE
Description: Add noise/disturbance to aircraft state
Example: ‘NOISE ON’

Argument	*Description*
ON	Turn noise ON
OFF	Turn noise OFF
TOGGLE	Toggles noise

NORESO

Arguments: acid/*/ALL, [ON/OFF]
Description: Other aircraft will not do resolutions on NORESO aircraft
Remark: Activating NORESO does not affect resolution setting (see RESO)
Example: ‘NORESO KL101’ Nobody will avoid this aircraft

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
ON	Turn NORESO ON
OFF	Turn NORESO OFF

OCE

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create an oceanic sector polygon or redefine polygon to OCE
Remark: Click on the radar-screen to get the line segment points. Sector polygons will be used to create ATC facilities (see ATC)
Example: ‘OCE SHANNON 20000 60000 52.64654 2.4534 52.6545 2.6754645…’

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

OCECLIMB

Arguments: [0:4]
Description: Sets what types of aircraft try to climb in oceanic
Example: ‘OCECLIMB 3’

Argument	*Description*
[0:4]	0 = nobody 1 = ADSB-IN only 2 = ITP only 3 = ADSB-IN & ITP 4 = all

OP/OPERATE

Arguments: none
Description: Start scenario

ORIG

Arguments: acid/*/#, airport
Description: Set origin of aircraft
Example: 'ORIG KL101 EHAM'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/#	Applicable to last created aircraft
Airport	Airport identifier

P/PCALL

See CALL

PAN

Arguments: LEFT/RIGHT/UP/DOWN/acid/airport/navaid/lat,lon
Description: Change/center radar screen viewing area
Example: 'PAN 33.5 –88.7': Center radar screen around this Lat/Lon

Argument	*Description*
LEFT	Move viewing area to the left
RIGHT	Move viewing area to the right
UP	Move viewing area up
DOWN	Move viewing area down
Acid	Center viewing area to aircraft position
Airport	Center viewing area to airport location
Navaid	Center viewing area to VOR/NDB/WPT location
Lat/Lon	Center viewing area to Lat/Lon position

PASASLVL/PALVL/PASASLEVEL/PALEVEL/PREDASASLVL/PREDASESLEVEL

Arguments: level
Description: Set conflict prevention level (see PREDASAS)
Example: 'PASASLVL 4': Use full sweet of CP tools

Argument	*Description*
level	0 = none 1 = HDG 2 = HDG + VS 3 = HDG + VS + ALT

	4 = HDG + VS + ALT + SPD

PASSWORD/PW/PASSW/PASWORD/PASW/PASSWRD/PASSWD

Arguments: [ON/OFF/TOGGLE]
Description: Switch password protection of web session on/off
Remark: Only applicable for web/internet functionality
Example: 'PW': Toggle password protection

Argument	*Description*
ON	Use password protection
OFF	Do not use password protection
TOGGLE	Toggles password protection

PAUSE

See HOLD

PDS

Arguments:

- id/*/ALL OFF
- id/*/ALL [lead/RTA] [INTERVAL][ON]
- id/*/ALL [DEFAULT/SWITCH/PROFONLY/SPDCAPINH] ON/OFF
- id/*/ALL [OWIPROF] ON/OFF
- id/*/ALL INTERVAL / MINDIST / GIVEUPDIST / MINSPD / MAXSPD / MINTIME / LEADFAS value
- id/*/ALL LEADFAS val [val=0 (use ADS-B),val=1 (not avail),val=2 (use own),val=xxx (use value)]

Description: Activate and/or configure the Paired Dependent Speed algorithm for Airborne Precision Spacing.
Example: 'PDS * off': Turn spacing off on all aircraft.
Example: 'PDS KL101 UA456' 90': Command KL to space 90 sec behind UA.
Example: 'PDS DEFAULT SPDCAPINH OFF': Change spdcapinh default value.
Example: 'PDS * LEADFAS 130': Use 130 kts final approach speed for all aircraft.

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
OFF	Turn PDS off
lead	Traffic id of lead aircraft
RTA	Use RTA mode
INTERVAL	Spacing interval (sec)
ON	Activate PDS mode
DEFAULT	Change defaults
SWITCH	Switch PDS ON/OFF
PROFONLY	Fly profile only mode
SPDCAPINH	Speed caption inhibit flag
OWIPROF	Overwrite initial profile sets initial profile to current Mach /Altitude
MINDIST	Minimum allowed distance
GIVEUPDIST	Give up distance

MINSPD	Minimum allowed speed
MAXSPD	Maximum allowed speed
MINTIME	Minimum allowed time
LEADFAS	Final Approach Speed of lead
value	Time/distance/speed value

PDSCONFIG

Arguments: id/*/ALL/DEFAULT (WIND_UPD_NONE | WIND_UPD_OWN | WIND_UPD_LEAD | WIND_UPD_ALL)
Description: Update APS algorithm wind model with information from ownship, lead or all other surrounding aircraft
Example: 'PDSCONFIG * WIND_UPD_ALL': Use all available information

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
DEFAULT	Change default setting
WIND_UPD_NONE	Do not update APS internal wind model
WIND_UPD_OWN	Use ownship data to update wind model
WIND_UPD_ALL	Use all available ADS-B data to update wind model

PINCLUDE

See CALL

PLABEL/PLABLE/PLAB

Arguments: [ON/OFF/T/F]
Description: Turns on/off polygon labels

Argument	*Description*
ON / T	Display polygon labels
OFF / F	Do not display polygon labels

PLAYBACK/PB

Arguments: ON/OPEN/OFF
Description: Turns playback mode ON/OFF
Remark: Requires a CSV file (see TRAFDATLOG)
Example: 'PB ON': Opens input window for file selection

Argument	*Description*
ON	Opens input window for file selection
OPEN	Opens input window for file selection
OFF	Stops playback mode

POLLCONF/PC

Arguments: acid [,dtlook]
Description: Poll aircraft for conflicts
Example: 'POLLCONF KL101': Poll for conflict with previous defined look-ahead.

Argument	*Description*
acid	Apply only to this aircraft
dtlook	Look-ahead time

POLYATM/PATM

Arguments: */ALL/label atm
Description: Set or change ATM mode for specific polygon
Example: 'PATM zfw FFAS' Set ZFW sector to Free Flight airspace

Argument	*Description*
*/ALL	All polygons
label	Apply only to this specific polygon
atm	GENPOLY = generic type FFAS = Free Flight airspace MAS = managed airspace UMAS = unmanaged airspace DANGER = dangerous RESTRICT = restricted PLAN = planner controller

POLYDENS

Arguments: label
Description: Checks traffic density inside polygon
Example: 'POLYDENS zfw'

Argument	*Description*
Label	Polygon label

POLY/POLYGON

Arguments: label,lat0,lon0,lat1,lon1,… | LOAD filename
Description: Create a polygon
Remark: Click on the radar-screen to get the line segment points
Example: 'POLY LOAD polyfile.pol'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lat,lon	Latitude & longitude of segment point
LOAD	Instruct the poly command to load data from file
filename	File that includes polygon definitions

POS

Arguments: acid/airport
Description: Get position and information of aircraft or airport
Example: 'POS KL101'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
Airport	Airport identifier

PREDASAS/PA/PASAS

Arguments: acid/*/ALL [,ON/OFF]
Description: Equip aircraft with conflict prevention (predictive ASAS).
Remark: Without second parameter, TMX will report current CP bands status
Example: 'PA KL101': command window will display all CP bands for KL101

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
ON	Turn PASAS on
OFF	Turn PASAS off

PRIO

Arguments: id/*/ALL/RFS/MCS, ON/OFF/TOGGLE
Description: Set ASAS priority
Example: 'PRIO RFS ON': the RFS has priority over all other aircraft

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
RFS	Apply to RFS
MCS	Apply to master MCS (not used)
ON	Set priority
OFF	Reset priority
TOGGLE	Toggles priority on/off

PRIORULES

Arguments: [ON/OFF]
Description: Use priority rules for conflict detection and resolution
Example: 'PRIORULES': toggle priority rules

Argument	*Description*
ON	Use priority rules
OFF	Do not use priority rules

PSDO

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create an pseudo sector polygon or redefine polygon to PSDO
Remark: Click on the radar-screen to get the line segment points. Sector polygons will be used to create ATC facilities (see ATC)
Example: 'PSDO REGION1 20000 60000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

PWIND

See WIND

PZ

Arguments: */id [ON/OFF]
Description: Set flag to draw protected zone of aircraft on ND
Example: 'PZ * ON'

Argument	*Description*
Id	Apply only to this aircraft
*	Apply to all aircraft
ON	Use priority rules
OFF	Do not use priority rules

QDR/QDRDIST

See QTEDIST

QDRPOS

See QTEPOS

QQSCEN

Arguments: file/OFF
Description: Open and activate QinetiQ traffic scenario
Example: 'QQSCEN file.txt'

Argument	*Description*
file	QinetiQ traffic scenario
OFF	Turn off QQSCEN

QTE/QTEDIST

Arguments: lat1,lon1,lat2,lon2 / wp1, wp2 / ap1, ap2
Description: Calculates distance and bearing from point 1 to point 2
Example: 'QTEDIST KLAX KDFW'

Argument	*Description*
Lat1	Latitude point 1
Lon1	Longitude point 1
Lat2	Latitude point 2
Lon2	Longitude point 2
Wp1	Waypoint id 1
Wp2	Wayoint id 2
Ap1	Airport id 1
Ap2	Airport id 2

QTEPOS

Arguments: (lat,lon/wpt) ,crs, dist
Description: Calculates new lat/lon position based on provided position, distance and course.
Example: 'QTEPOS 50.245, 4.77898, 120, 55.4'

Argument	*Description*
Lat	Origin latitude (deg)
Lon	Origin longitude (deg)
Wpt	Waypoint name
Crs	Bearing to new point (deg)
Dist	Distance (nm)

QTEQTE

Arguments: lat1, lon1, crs1, lat2, lon2, crs2
Description: Calculates location of intersection course1 and course2
Example: 'QTEQTE 4.77898, 53.245, 85, 4.9012, 52.234, 315'

Argument	*Description*
Lat1	Latitude point 1
Lon1	Longitude point 1
Lat2	Latitude point 2
Lon2	Longitude point 2
Crs1	Course 1
Crs2	Course 2

QUIT

See EXIT

R

See ROUTE

RADAR/RAD

Arguments: none
Description: Switch to Radar display
Example: 'RADAR'

RADARDT/RDT

Arguments: rate/OFF
Description: Set radar screen refresh rate
Example: 'RADARDT 1' Update radar screen once every 1 sec

Argument	*Description*
rate	Update rate (sec)
OFF	Turn OFF radar screen updates

RAMSSCEN

Arguments: traffile,[rtefile,navfile]/OFF
Description: Open and activate RAMS traffic scenario
Example: 'RAMSCEN traf.txt rte.txt'

Argument	*Description*
traffile	Traffic file
rtefile	Route file

Navfile	Navigation aids files
OFF	Turn off RAMSSCEN

RAMSSECTOR

Arguments: sectorfile, boundaryfile, cornerfile
Description: Define sectors based on RAMS sector specification files
Example: 'RAMSSECTOR sec.tct boun.txt corn.txt'

Argument	*Description*
sectorfile	Sector file
boundaryfile	Sector boundary file
cornerfile	Corner file

RD

See REDEFWPT

REC/RECORD

Arguments: filename/STOP/OFF
Description: Saves current situation to file and continues recording
Example: 'REC recording.scn'

Argument	*Description*
Filename	Filename (max 128 char)
STOP	Stop recording
OFF	Stop recording

RECDT

See TRAFRECDT

RECMOVIE

See MOVIE

RECOCE/RECORDOCE

Arguments: filename/STOP/OFF
Description: Saves aircraft parameters as they enter oceanic airspace
Example: 'RECOCE recording.scn'

Argument	*Description*
Filename	Filename (max 128 char)
STOP	Stop recording
OFF	Stop recording

RECONACTRTE

Arguments: [TOGGLE/ON/OFF]
Description: Re-connecting to active route when a/c are in LNAV
Example: 'RECONACTRTE OFF'

Argument	*Description*

TOGGLE	Toggle between ON / OFF
ON	Reconnect to active route (default)
OFF	Fly direct to next waypoint

REDEFWPT

Arguments: wpname, lat, lon
Description: Redefines locatoin of a user defined waypoint
Example: 'REDEFWPT FRANK 30.324,-120.896'

Argument	*Description*
wpname	User defined waypoint name
Lat	Latitude point (deg)
Lon	Longitude point (deg)

REF

Arguments: acid, fuel, way, time
Description: set reference values for evaluation of ASAS
Example: 'REF KL101 800, 200, 1500'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
Fuel	Reference fuel consumption (kg)
Way	Reference way flown (nm)
Time	Reference time spent (s)

RENAME/REN/RENA

Arguments: oldid, newid
Description: Rename aircraft
Example: 'RENAME KL101 UA101'

Argument	*Description*
Oldid	Original aircraft identifier
Newid	New aircraft identifier

REPEAT

Arguments: n/*, dt, cmd
Description: Repeat given command n times with dt sec in between
Example: 'REPEAT 5 1 ZOOM'

Argument	*Description*
n	Number of repeats (* = 9999999)
dt	Time between commands (sec)
cmd	TMX command to be repeated

REPOS

Arguments: acid,orig,[time]
Description: Reposition traffic to FF situation
Example: 'REPOS KL101 EHAM'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
Orig	Origin airport identifier
time	Time to be reduced (sec)

REQ

Arguments: id,alt
Description: Request altitude change
Example: 'REQ KL101 21000'

Argument	*Description*
id	Only apply to aircraft with this callsign
Alt	Requested altitude

RESET

See IC

RESETRTA/RRTA/RTARESET

Arguments: */id ,[wpname]
Description: Resets/deletes required time of arrival constraint of a waypoint
Example: 'RESETRTA *'

Argument	*Description*
*	Apply to all aircraft flying to the waypoint
id	Apply only to this aircraft
wpname	Waypoint identifier

RESLOG/RESOLOG

Arguments: OFF/(ON [filename])
Description: Open or close resolution logging file.
Example: 'RESLOG ON'

Argument	*Description*
ON	Turn on data logging
OFF	Turn off data logging
filename	User defined filename, otherwise scenario name will be used

RESO

Arguments: acid/*/ALL, [ON/OFF]
Description: Set aircraft conflict resolution ON/OFF
Remark: Not using a second argument will toggle the conflict resolution ON/OFF
Example: 'CD * OFF'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft
ON	Turn conflict resolution ON

OFF	Turn conflict resolution OFF

RESOMETHH

See HMETH

RESOMETHV

See VMETH

RESONR

Arguments: NONE/NO/index
Description: Sets active resolution algorithm and method
Remark: See .\data\conflict.dat for a complete list of resolution implementations
Example: 'RESONR 25' : use state KB3D++

Argument	*Description*
NONE	NO resolution method used
NO	NO resolution method used
index	Integer number related to method

RESOS/RESOSTRAT

Arguments: strat
Description: Sets the strategy that StratWay is using
Example: 'RESOSTRAT 1'

Argument	*Description*
strat	Number or StratWay strategy name

RESOTYPE

Arguments: [0:1]
Description: Sets what reso algorithm to use on ND
Example: 'RESOTYPE 1'

Argument	*Description*
[0:1]	0 = Modified Voltage Potential 1 = KB3D

RETAKE

Arguments: acid [connection#]
Description: Retake one of the aircraft in TMX and assign it to an external simulator
Example: 'RETAKE KL101 5': Retake aircraft KL101 and assign it to external simulator that is connected to connection # 5.

Argument	*Description*
Acid	Only apply to aircraft with this callsign
connection	External connection index

RETURN/RET

Arguments: none
Description: Insert return into edit text

RETYPE

Arguments: acid/*/#, actype
Description: Change aircraft type
Example: 'RETYPE KL101 B744': Make KL101 a B747-400

Argument	*Description*
Acid	Aircraft identifier
*/#	Apply to last created aircraft
Actype	ICAO identifier for aircraft type

RFACH/RESOFACH

Arguments: x.x
Description: Set horizontal resolution factor (1.0 = 100%)
Example: 'RFACH 0.5': Resolve only half the conflict

Argument	*Description*
x.x	Resolution factor

RFACV/RESOFACV

Arguments: x.x
Description: Set vertical resolution factor (1.0 = 100%)
Example: 'RFACV 0.5': Resolve only half the conflict

Argument	*Description*
x.x	Resolution factor

RIGHT

See HDG

RMETHH

See HMETH

RMETHV

See VMETH

RNP

Arguments: x.x
Description: Set Required Navigation Performance
Example: 'RNP 3.0'

Argument	*Description*
x.x	RNP requirement [nm] default = 1.0 nm

ROUTE

Arguments: acid/*/ALL [,ON/OFF/TOGGLE]
Description: Show or hide aircraft route
Example: 'ROUTE * OFF'

Argument	*Description*

Acid	Only apply to aircraft with this callsign
*	All aircraft
ON	Show route
OFF	Hide route
TOGGLE	Toggles show/hide

ROUTEWPTS/RTEWPTS

Arguments: [nr-wpts]
Description: Show number of waypoints
Example: 'RTEWPTS 10'

Argument	*Description*
Nr-wpts	Number of waypoints to be shown (0 – 99)

RRING/RRINGS/RINGS

Arguments: [lat,lon/navid/OFF],radius
Description: Draw range rings on radar screen
Example: 'RRING KDFW 10'

Argument	*Description*
Lat,lon	Latitude, longitude
navid	Navaid (VOR, NDB, Airport)
OFF	No longer draw rang rings
radius	Radius (nm)

RSZONER/RSZONEDH

Arguments: val
Description: Change autonomous a/c resolution zone
Remark: RSZONER changes radius while RSZONEDH changes height.
Example: 'RSZONER 5.1': Use 5.1 Nm (radius) for conflict resolution.

Argument	*Description*
val	Value (nm or ft)

RT

Arguments: speaker, freq, message
Description: Send RT message to RT simulator
Example: 'RT me 1 hallo'

Argument	*Description*
speaker	Speaker
Freq	Frequency
message	Message (max. 256 characters)

RTA

Arguments: acid,(wpnam,rta)/NONE
Description: Sets a required time of arrival constraint to a waypoint
Example: 'RTA KL101 URK 300'

Argument	*Description*
Acid	Apply only to this aircraft
wpname	Waypoint identifier
rta	Required Time of Arrival in sec (simulation time)
NONE	Clear al RTAs

RTF

Arguments: factor (1.0 = real-time) [hh:mm:ss]
Description: Sets real time factor
Example: 'RTF 5 00:10:00': After 10 minutes return to RTF 1

Argument	*Description*
factor	Real time factor (1 sec becomes factor sec)
hh:mm:ss	Return to RTF 1 at this specified simulation time

SAVEAC

Arguments: Acid/ALL/*/OFF/(filename[,AUTO])
Description: Saves aircraft situation to IC file

Argument	*Description*
Acid	Only applicable to this aircraft
ALL/*	Applicable to all aircraft
OFF	Stop saving aircraft situation
filename	File name (character*128)
AUTO	Sets saving mode to AUTO

SAVEIC

Arguments: filename
Description: Saves current traffic scenario to file with time stamp 00:00:00

Argument	*Description*
filename	File name (character*128)

SAVETAXIWPT

Arguments: [airport]
Description: Saves taxi waypoints and stopbars of all or given airport

Argument	*Description*
airport	Airport ID

SAY

See CHAT

SB

Arguments: id, G[O]/C[AUTION]/S[TOP]
Description: Set status of stopbar to control taxiing aircraft
Remark: Stopbars need to be predefined in an airport specific taxi-file (see .\data\navdata\vx.x
Example: 'SB MMMXSB1 STOP'

Argument	*Description*
id	Stopbar identifier
Status	G[O]/C[AUTION]/S[TOP]

SCEN/SCENNR

Arguments: +/-/number/name/LOAD
Description: Scenario selection and load (??)
Remark: To initialize a new scenario use IC (see 'IC')
Example: 'SCEN test.scn': select and load scenario

Argument	*Description*
+	Scenario number + 1
-	Scenario number - 1
Number	Scenario number
Name	Scenario name
LOAD	Load new scenario

SCHEDULE/SCHED

Arguments: airport [ON] | airport/* OFF
Description: Airport arrival scheduler
Remark: Requires a schedule file in the form of AIRPORT_ID_SCHED.DAT
Example: 'SCHEDULE KDFW'
Example: 'SCHEDULE * OFF'

Argument	*Description*
airport	Airport ID
*	Apply to all airports
ON	Turn scheduling ON
*	All airports
OFF	Turn scheduling OFF

SECTOR/SEC

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create a sector polygon or redefine polygon to sector
Remark: Click on the radar-screen to get the line segment points. Sector polygons will be used to create ATC facilities (see ATC)
Example: 'SEC EHAM 0000 10000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

SEMIAUTO

Arguments: none
Description: Sets reso mode for RFS to semi automatic

SEND

Arguments: (RFS/HOST/HOST0/{MCS/MHOST/HOST#
acid/*/ALL}/F/FMS/RFMS/V/VIT/VITA/(TAXI/TAXIRTE
acid)/CMD2HOST/CMD2FWC),message
Description: Send a text message to an external simulator
Example: 'SEND RFS ready for operate'

Argument	*Description*
RFS	Research Flight Simulator
MCS/MHOST/HOST#	Multi Cockpit Simulator (any other external sim.)
acid	Aircraft identifier
*/ALL	All aircraft
F/FMS/RFMS	Flight Management System
V/VIT/VITA	VITA simulator
TAXI[RTE]	Taxi(route)
CMD2HOST	Command to host
CMD2FWC	Command to ????
message	Text

SENDCOCKPITDATA

Arguments: acid/*
Description: Send EFIS and FMS data of aircraft acid to host2efis, host2panel and fms2efis
Example: 'SENDCOCKPITDATA KL405'

Argument	*Description*
Acid	Send data of this aircraft
*	Apply to all aircraft

SENDDL

Arguments: command [arguments]
Description: Test data link output (downlink)
Example: 'SENDDL OP'

Argument	*Description*
Command	Command to be send
Arguments	Possible arguments for command

SENDEFIS

See SENDCOCKPITDATA

SENDUL

Arguments: command [arguments]
Description: Test data link output (uplink)
Example: 'SENDUL ALTIMETER / AIRP_ALTIMETER'
Example: 'SENDUL TAXI_TO / TAXI_TO_HS / CROSS'
Example: 'SENDUL LINE_UP / CLEARED TO / CLEARED TORA'
Example: 'SENDUL CLIMB_TO / DESCEND_TO / CONTACT / MONITOR'
Example: 'SENDUL ASAS FOLLOW / ASAS MERGE / ASAS VECTOR /

ASAS TERMINATE’

Argument	*Description*
Command	Command to be send
Arguments	Possible arguments for command

SEQNR/SQNR

Arguments: id, #
Description: Assign a sequence number to an aircraft
Example: ‘SEQNR KL101 2’

Argument	*Description*
id	Apply only to this aircraft
#	Sequence number

SET

Arguments: A[LT]/H[DG]/S[PD] trafid value
Description: Set/Move aircraft to position with new parameter
Example: ‘SET ALT KL101 20000’: Set/Move aircraft KL101 to 10000 ft.

Argument	*Description*
A[LT]	Parameter to set altitude
H[DG]	Parameter to set heading
S[PD]	Parameter to set speed
trafid	Apply only to this aircraft
value	Float representing altitude, heading or speed

SETEXP

Arguments: time
Description: Set expire time for external ADS-B traffic
Example: ‘SETEXP 300’

Argument	*Description*
Time	Time in seconds

SETFR

Arguments: id/*/ALL [VFR/IFR/AFR]
Description: Set flight rules
Example: ‘SET KL101 AFR’

Argument	*Description*
id	Apply only to this aircraft
*/ALL	Apply to all aircraft
VFR	Visual Flight Rules
IFR	Instrument Flight Rules
AFR	Autonomous Flight Rules

SETITP

See ITP

SETRESO

See RESONR

SETRTA/SETR

Arguments: id ,[wpname], time
Description: Sets a required time of arrival constraint to a waypoint
Example: 'SETRTA KL101 URK 300'

Argument	*Description*
id	Apply only to this aircraft
wpname	Waypoint identifier (if omitted metering fix will be used)
time	Required Time of Arrival (sec)

SETTISB

See TISB

SETTMA

Arguments: ffas/mas
Description: Set all Tracon/TMA ATM to Free Flight or Managed
Example: 'SETTMA ffas'

Argument	*Description*
ffas	Free Flight Airspace
mas	Managed Airspace

SHOW

Arguments: ALL/WEB/ONLINE/TOGGLE
Description: Draw either all aircraft or only those connected through the web
Remark: Only applicable for web/internet functionality
Example: 'SHOW ALL'

Argument	*Description*
ALL	Draw all aircraft
WEB/ONLINE	Draw only web aircraft
TOGGLE	Toggles drawing of aircraft

SHOWPWIND/SHOWPWND

Arguments: [alt/OFF]
Description: Draw 'predicted' wind vectors on radar-screen
Example: 'SHOWPWIND 31000'

Argument	*Description*
alt	Show 'predicted' wind at this altitude only
OFF	No longer draw wind

SHOWWIND/SHOWTWND/SHOWTWIND/SHOWWND

Arguments: [alt/OFF]
Description: Draw 'truth' wind vectors on radar-screen
Example: 'SHOWWIND'

Argument	*Description*
alt	Show ‘truth’ wind at this altitude only
OFF	No longer draw wind

SIGHTANGLE

Arguments: SIGHTANGLE [angle]
Description: Set TMX sightAngle to a particular (non-default) value.
Note: Sight angle is used te determine which TMX aircraft need to be send toMEID
Example: ‘SIGHTANGLE 15’

Argument	*Description*
Angle	Sight angle in deg

SIMRFS/SIMHOST0/SIMHOST

Arguments: ON/T/OFF/F
Description: Simulate RFS inputs (?)
Example: ‘SIMRFS ON’

Argument	*Description*
ON/T	Turn simrfs on
OFF/F	Turn simrfs off

SIMSTAT

Arguments: application [status]
Description: Set simulation state for external simulation applications
Example: ‘SIMSTAT FMS CONFIG’
Example: ‘SIMSTAT HOST IC-SELECT’

Argument	*Description*	
Application	‘FMS’ or ‘HOST’	
Status	‘NONE’	‘CONFIG’
	‘RESET’	‘IC-SELECT’
	‘IC-CALC’	‘IC-READY’
	‘OPERATE’	‘HOLD’
	‘STOP’	‘EXIT’

SKIP

Arguments: hh:mm:ss/x
Description: Skip specified amount of time
Remark: Only in playback mode
Example: ‘SKIP 00:01:30’: Skips to one and a half minute playback time
Example: ‘SKIP 300’: Skips 300 seconds forward

Argument	*Description*
Hh:mm:ss	Time to skip to in hours, minutes and seconds
X	Time to be skipped in seconds

SNAV

Arguments: acid/*/ALL, ON/OFF/TOGGLE
Description: Turn ON/OFF SNAV speed guidance
Example: 'SNAV * ON'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
ON	Turn SNAV on
OFF	Turn SNAV off
TOGGLE	Toggles SNAV on/off

SO

See EXIT

SOUND/SND

Arguments: [ON/OFF]
Description: Turn sound ON/OFF
Remark: Sound only applies to conflict detection when in Navigation Display.
Example: 'SOUND': Toggles sound

Argument	*Description*
ON	Turn SOUND on
OFF	Turn SOUND off

SPACE

See PDS

SPD/S

Arguments: acid/*/#/ALL, SPD
Description: Manual commanded speed override
Remark: Manual override will turn of VNAV-SPD
Example: 'SPD KL101 0.83'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/#	Apply to last created aircraft
ALL	Apply to all aircraft
SPD	New manual speed (IAS or MACH)

SPDH/SHOLD/SPDHOLD/SH

Arguments: acid/*/ALL
Description: Speed hold mode
Example: 'SPDH KL101'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft

SQ/SQUAWK

Arguments: [Acid/*/#], transponder-code
Description: Set transponder code
Remark: With only the transponder code, TMX returns id and type
Example: 'SQ 5499': TMX might return 'KL101 B744'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/#	Apply to last created aircraft
Transponder-code	SQUAWK code (VFR = 1200)

ST/STAT

Arguments: acid/*/# [,status_code]
Description: Set traffic status code
Example: 'STAT KL101 DEAD'

Argument	*Description*
Acid	Apply to selected aircraft
*/#	Apply to last created aircraft
Status_code	Character string*8 (?)

STAR

Arguments: trafid string
Description: Assign a standard instrument arrival route
Example: 'STAR KL101 URKEHAMRW36L'

Argument	*Description*
trafid	Apply to this aircraft only
String	Route name

START

See OP

STARTPOINT

See ENTRY

STOP

See EXIT

STOPBAR

See SB

STOPSENDCOCKPITDATA

Arguments: acid/*
Description: Stop sending EFIS and FMS data of aircraft acid
Example: 'STOPSENDCOCKPITDATA KL405'

Argument	*Description*

Acid	Stop sending data of this aircraft
*	Apply to all aircraft

STOPSENDEFIS

See SENDCOCKPITDATA

STRIP/STRIPTXT

Arguments: id txt/#
Description: Set strip type or place text in strip window
Example: 'STRIP 2'
Example: 'STRIP KL101 This is a test'

Argument	*Description*
id	Apply to this aircraft only
txt	Free text string
#	0 = Default strip type 1 = Text strip type 2 = Autonomous Operations strip type 3 = Approach Precision Spacing strip type

SUA

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create a special use airspace polygon or redefine polygon to SUA
Remark: Click on the radar-screen to get the line segment points.
Example: 'SUA usaf1 0000 10000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

SW

Arguments: option [ON/T/OFF/F]
Description: Set switches
Example: 'SW ADSB': Toggles ADS-B switch

Argument	*Description*
Option	'ADSB' 'TISB' 'TCAS' 'CPDLC' 'ADSB2TISB'
ON/T	Turn option switch on
OFF/F	Turns option switch off

SWACTTCP

Arguments: ON/OFF
Description: Automatic insertion acceleration/deceleration TCP's

Example: ‘SWACTTCP ON’

Argument	*Description*
ON	Insert acceleration/deceleration TCP
OFF	Do not insert acceleration/deceleration TCP

SWATCPASAS

See ATCPASAS

SWATC

Arguments: ON/OFF
Description: Set ATC on/off
Example: ‘SWATC ON/OFF’

Argument	*Description*
ON	Set ATC on
OFF	Set ATC off

SWAVRGCDGS

Arguments: [ON/OFF]
Description: Switch to use average groundspeed for state CD during climb / descend
Example: ‘SWAVRGCDGS ON’

Argument	*Description*
ON	Use average groundspeed during climb and descend
OFF	Use current groundspeed at all times

SWBGPASAS

See BGPASAS

SWBLUNDR

Arguments: [ON/OFF]
Description: Switch blunder protection
Example: ‘SWBLUNDR ON’

Argument	*Description*
ON	Use blunder protection in Intent CD&R
OFF	Do not use blunder protection in Intent CD&R

SWCOFILT

See FILTER

SWCOLEQP

Arguments: ON/OFF
Description: Use color coding according to equipage
Example: ‘SWCOLEQP ON’

Argument	*Description*
ON	Use color coding

OFF	Do not use color coding

SWDELAC

Arguments: [ON/OFF/time]
Description: Switch to auto delete aircraft that leave the experiment area
Example: 'SWDELAC 600': Aircraft will be deleted 600 sec after creation

Argument	*Description*
ON	Aircraft leaving the experiment area will be deleted
OFF	No aircraft will be automatically deleted
Time	Aircraft will be deleted 'time' seconds after creation

SWDEBUG

Arguments: [ON/OFF]
Description: Master debug switch toggle

Argument	*Description*
ON	Set debug mode on
OFF	Set debug mode off

SWDRAWTAXIPZ

Arguments: [ON/OFF]
Description: Draw taxi protected zone
Example: 'SWDRAWTAXIPZ': Toggles taxi protected zone

Argument	*Description*
ON	Draw protected zone
OFF	Do not draw protected zone

SWENDTCP

Arguments: ON/OFF
Description: Automatic insertion of a TCP at end of look-ahead time
Example: 'SWENDTCP ON'

Argument	*Description*
ON	Insert end TCP
OFF	Do not insert end TCP

SWFMSSPD

Arguments: IAS/MACH/BOTH/OFF/NONE
Description: Controls what speed to follow. Prevents Mach/CAS transition
Example: 'SWFMSSPD MACH': Use Mach only

Argument	*Description*
IAS	Use IAS only
MACH	Use Mach only

BOTH OFF NONE	Use both

SWITCHSCEN

Arguments: file
Description: Switch to different scenario
Remark: To initialize a new scenario use IC (see 'IC')
Example: 'SWITCHSCEN test.scn'

Argument	*Description*
file	Scenario name

SWLAYER

Arguments: [ON/OFF]
Description: Switch to enable layer control
Remark: Layer control enables automatic switching of equipage modes when flying from one ATM sector to another. For instance CD&R will be enabled when flying from managed airspace into Free Flight airspace.
Example: 'SWLAYER OFF'

Argument	*Description*
ON	Use layer control
OFF	Do not use layer control

SWLOWALT

Arguments: loweraltitude
Description: Set lower altitude for aircraft onboard military radar
Example: 'SWLOWALT 1500'

Argument	*Description*
loweraltitude	Lower altitude [ft or FL]

SWMFIX

Arguments: ON/OFF
Description: Automatic TMX metering fix insertion
Example: 'SWMFIX ON'

Argument	*Description*
ON	Activate
OFF	Deactivate

SWNASA

Arguments: [ON/OFF]
Description: Turn NASA specific code ON/OFF
Example: 'SWNASA ON'

Argument	*Description*
ON	Activate

OFF	Deactivate

SWNLRPASAS

Arguments: ON/OFF
Description: Switch between using the NLR PASAS system and ACCoRD CP system
Example: 'SWNLRPASAS OFF'
Default: SWNLRPASAS = .not. SWNASA

Argument	*Description*
ON	Use NLR PASAS system
OFF	Use NASA ACCoRD CP system (BANDS)

SWPASAS

See PREDASAS

SWPASSW/SWPASW/SWPASS

See PASSWORD

SWRAD

Arguments: GEO/DETAIL/GRID/ASL/ASH/AIRSPACE/APT/VOR/WPT/NDB /STB/PSDO/NDAC/LABEL/SYM/PLAB/CWP/ROSE/AWHI(GH)/AWLO(W)
Description: Change radar screen display features
Example: 'SWRAD GEO': Turn on/off geographic coast/state lines

Argument	*Description*
GEO	Turn on/off geographic coast/state lines
DETAIL	Increase/decrease geographic detail
ASL	Cycle through lower airspace sectors
ASH	Cycle through higher airspace sectors
AIRSPACE	Cycle through sectors
APT	Turn on/off airport symbols
VOR	Turn on/off VOR symbols
WPT	Turn on/off waypoint symbols
NDB	Turn on/off NDB symbols
STB	Turn on/off stop-bar symbols
PSDO	Turn on/off pseudo TMX assignment polygons
NDAC	Cycle through navigation display aircraft (ADS-B and/or TCAS)
LABEL	Cycle through traffic label information
SYM	Cycle through radar screen traffic symbols
PLAB	Turn on/off polygon labels
CWP	Turn on/off certain waypoints???
ROSE	Turn on/off compass rose (doesn't work in every mode?)
AWHI(GH)	Turn on/off high level enroute airways
AWLO(W)	Turn on/off low level enroute airways

SWRECCRE

Arguments: [ON/OFF]
Description: Switch to record creation data instead of current (see SAVEIC)

Example: ‘SWRECCRE’: Toggles record creation/current data

Argument	*Description*
ON	Use creation data
OFF	Use current data

SWREQOCE

Arguments: [ON/OFF]
Description: Allow oceanic track entry requests
Example: ‘SWREQOCE’: Toggles oceanic track entry requests

Argument	*Description*
ON	Allow entry requests
OFF	Do not allow entry requests

SWRND

Arguments: [ON/OFF]
Description: Toggles random
Example: ‘SWRND ON’

Argument	*Description*
ON	Turn on RND
OFF	Turn off RND

SWRTA

Arguments: [ON/OFF/ONCFL]
Description: Master RTA capability switch
Example: ‘SWRTA ONCFL’: Aircraft will only activate RTA algorithm after being in a conflict, being impeded in its operations or within 100nm from RTA waypoint.

Argument	*Description*
ON	Use closed-loop RTA functionality if RTA defined
OFF	Do not use RTA functionality
ONCFL	Use RTA after a conflict, after being impeded or within 100nm from RTA waypoint

SWSPDTCP

Arguments: ON/OFF
Description: Automatic insertion speed TCP’s
Example: ‘SWSPDTCP ON’

Argument	*Description*
ON	Insert speed TCP
OFF	Do not insert speed TCP

SWSTOPRESO

Arguments: [ON/OFF]
Description: Immediately stop resolution when out of conflict
Example: ‘SWSTOPRESO ON’

Argument	*Description*
ON	Immediately stop reso maneuver if out of conflict
OFF	Continue to reso command even if out of conflict

SWTAXI

Arguments: ON/OFF
Description: Set master taxi switch. Otherwise landing aircraft will be deleted when they reach a speed of 20 kts after roll out
Example: 'SWTAXI ON'

Argument	*Description*
ON	Master switch ON
OFF	Master switch OFF

SWTRACE

Arguments: [ON/OFF]
Description: Switch to trace execution implementation
Example: 'SWTRACE ON'

Argument	*Description*
ON	Trace execution implementation
OFF	Do not trace execution implentation

SWTRNTCP

Arguments: ON/OFF
Description: Automatic insertion turn TCP's
Example: 'SWTRNTCP ON'

Argument	*Description*
ON	Insert turn TCP
OFF	Do not insert turn TCP

SWTXT/SWTEXT

Arguments: trafid [ON/OFF]
Description: Turn debug text on radar screen on/off
Example: 'SWTXT KL101 ON'

Argument	*Description*
trafid	Apply only to this aircraft
ON	Switch text ON
OFF	Switch text OFF

SWUPALT/SWUPPALT

Arguments: upperaltitude
Description: Set upper altitude for aircraft onboard military radar
Example: 'SWUPPALT 40000'

Argument	*Description*

upperaltitude	Upper altitude [ft or FL]

SWUTCSYNCHOSTS

Arguments: ON/OFF
Description: Switch for option to synchronize the Multi Hosts UTC time with TMX (simulated) UTC time.
Example: 'SWUTCSYNCHOSTS ON'

Argument	*Description*
ON	Synchronization of simulated UTC time for Multi Hosts
OFF	No simulated UTC time synchronization for Multi Hosts

SYMBOL

Arguments: [number]
Description Cycles through all available aircraft symbols on radar screen and navigation display
Example: 'SYMBOL'
Example: 'SYMBOL 3'

Argument	*Description*
number	Set specific symbol option

SYSTEM

See EXIT

TAAMSCEN

Arguments: file/OFF
Description: Open and activate TAAM traffic scenario
Example: 'TAAMSCEN file.txt'

Argument	*Description*
file	TAAM traffic scenario
OFF	Turn off TAAMSCEN

TAKE

Arguments: acid [connection# || entid [hh:mm:ss]]
Description: Take one of the aircraft in TMX and assign it to an external simulator
Example: 'TAKE KL101 5': Take aircraft KL101 and assign it to external simulator that is connected to connection # 5.

Argument	*Description*
Acid	Only apply to aircraft with this callsign
connection	External connection index
entid	Entity ID of external aircraft (HLA only)
hh:mm:ss	Time at which TAKE should be issued (HLA only)

TAKE1ST

Arguments: acid
Description: Reset take list and use this id as first id in takelist

Remark: Only applicable for web/internet functionality
Example: ‘TAKE1ST KL101’

Argument	*Description*
Acid	Only apply to aircraft with this callsign

TAKETHEN/TAKENEXT

Arguments: acid
Description: Add aircraft to take list for Internet session
Remark: Only applicable for web/internet functionality
Example: ‘TAKENEXT KL101’

Argument	*Description*
Acid	Only apply to aircraft with this callsign

TAS2IAS

Arguments: tas, alt
Description: Convert True Airspeed to Indicated Airspeed
Example: ‘TAS2IAS 450 30000’

Argument	*Description*
tas	True Airspeed (kts)
alt	Altitude (ft or FL)

TAS2MACH

Arguments: tas, alt
Description: Convert True Airspeed to Mach number
Example: ‘TAS2MACH 450 30000’

Argument	*Description*
tas	True Airspeed (kts)
alt	Altitude (ft or FL)

TAXI

Arguments: acid/*/ALL, ON/OFF
Description: Enable taxi guidance when aircraft is on the ground
Example: ‘TAXI * ON’

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
ON	Turn Taxi on
OFF	Turn Taxi off

TAXIAIRPORT/TA

Arguments: (AIRPORT/A airportid ACT/DEACT) | (RUNWAY/R rwyid)
Description: Set airport taxi parameters
Example: ‘TA AIRPORT EHAM ACT’
Remark: Runway functionality not yet active

Argument	*Description*
Airportid	Apply to this airport
Rwyid	Apply to this runway
ACT/ ACTIVE/ ON	Activate airport taxiing
DEACT/ DEACTIVE/ OFF	Deactivate airport taxiing

TAXIMAXSPEED

Arguments: Acid/#/*/ALL, spd
Description: Set maximum allowed taxi speed
Example: 'TAXIMAXSPEED * 15'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
#	Applicable to last created aircraft
*/ALL	Applicable to all aircraft
spd	Taxi speed in kts

TAXIPLANNER

Arguments: Acid/#/*, wpname/(lat,lon)
Description: Plan and set a taxi route to destination waypoint or location
Example: 'TAXIPLANNER KL204 EHAMS064'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
#/*	Applicable to last created aircraft
Wpname	Destination waypoint code
Lat,lon	Lat/lon position of destination (deg)

TAXIRESPECT

Arguments: acid/*/ALL[, id] ,ON/OFF'
Description: Set aircraft to be respected by other traffic or not (on/off)
Remark: When turned OFF aircraft will not slow down or stop for.
Example: 'TAXIRESPECT * 15'

Argument	*Description*
Acid	Ownship aircraft identifier
*/ALL	Applicable to all aircraft
Id	Aircraft to be respected
ON	Respect ON
OFF	Respect OFF

TBLUNDER

Arguments: time
Description: Set additional resolution protection time to prevent state conflicts

Example: ‘TBLUNDER 10’

Argument	*Description*
Time	Additional time in seconds

TFM

Arguments: (SCHEDULE [method]) / (SPACING [method] [value]) /
(OUTPUT [filename])
Description: Execute Traffic Flow Management scheduling on flight queue, set TFM options or write current TFM schedule to file.
Example: ‘TFM SCHEDULE’
Example: ‘TFM SPACING FIXED 120’
Example: ‘TFM OUTPUT TFM_RESULT.CSV’

Argument	*Description*
SCHEDULE	Set TFM scheduling method and execute scheduling
method	Options for SCHEDULE : NONE / SIMPLE
SPACING	Set TFM spacing method
method	Options for SPACING: NONE / FIXED / WAKE
OUTPUT	Write current (scheduled) flight queue to file
filename	Filename of output file

THIST

See TRAFLOG

TIME

Arguments: run/sim/real/hla/utc [start-time]
Description: Controls the start time that TMX will use to display time
Example: ‘TIME HLA’

Argument	*Description*
RUN	Use run time
SIM	Use simulation time
REAL	Use wall clock time
HLA	Use external HLA time
UTC	Use UTC time
Start-time	Defines the start time

TISB

Arguments: id/*/ALL/DEFAULT
(TTYP/TTYPE #) /
(MINRANGE / MAXRANGE (TRANS/REC) range) /
(UPD type sec/ON/OFF) /
(FAIL [TRANS/REC/BOTH/NONE]) /
(DROP ALL/NONE/AUTO) /
(ERROR [ON/OFF/FIX/RDM | LAT/LON/ALT/SPD/TRK/VS/OFF err_value]) /
(WPT #wp)
Description: Set TIS-B settings

Remark: Initial default settings will be read from .\data\tisb.dat. TIS-B model uses the ADS-B model to send TIS-B messages.
Example 1: 'TISB TTYP 1': Transmit radar data only (see GBT)
Example 2: 'TISB DEF MINRANGE REC 100.': Set the default minimum receiver range to 100 Nm.
Example 3: 'TISB KL101 UPD SV 2': Update State Vector for KL101 to once every 2 seconds
Example 4: 'TISB * ERROR TRK 1': Put an error on track signal for all aircraft currently in simulation. Keep in mind default is not changed!

Argument	*Description*
Id	Apply only to this aircraft
*/ALL	Apply to all aircraft
DEFAULT	Use to change default setting. Next aircraft will use new default and no longer the data file settings
TTYP/TTYPE	Send: 0=None 1=Radar-only 2=Radar-ADSB 3=Radar+ADSB 4=ADSB-only
MINRANGE	Parameter to set minimum Ads-B range
MAXRANGE	Parameter to set maximum Ads-B range
TRANS	Parameter to set transmitter settings
REC	Parameter to set receiver setting
BOTH	Parameter to set both TRANS and REC
NONE	Use neither TRANS nor REC
range	Range in Nm
UPD[ATE]	Parameter to set message update
Type	Message type: SV/MS/RF/TS/TR/TC
Sec/ON/OFF	Update rate / activate / deactivate message
DROP	Parameter to set drop model
ALL	Drop all messages
NONE	Drop no messages
AUTO	Use drop model to drop message between min range and max range
FIX	Use a fixed error value
RDM	Use a random error value within +err_value and –err_value
Err_value	Signal error on LAT/LON/ALT/SPD/TRK/VS
WPT	Used to change total number of Trajectory Change points that will be sent
#wp	Number of waypoints

TLOOK

See DTLOOK

TLOOKINT

See DTLOOKINT

TMA

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create a terminal area polygon or redefine polygon to TMA
Remark: Click on the radar-screen to get the line segment points.
Example: 'TMA EHAM 0000 10000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

TMALEVEL/TMALEV/TMALVL

Arguments: altitude
Description: Set TMA Level
Remark: Below this altitude aircraft will be considered in TMA (see SWLAYER)
Example: 'TMALEVEL 10000'

Argument	*Description*
altitude	TMA airspace altitude (ft or FL)

TMARZNR/TMARDH

Arguments: val
Description: Change autonomous & managed a/c resolution zone
Remark: **TMARZNR** changes radius while **TMARDH** changes height.
Example: 'TMARZNR 3.1': Use 3.1 Nm (radius) for conflict resolution.

Argument	*Description*
val	Value (nm or ft)

TMASET

See SETTMA

TMAZNR/TMADH

Arguments: val
Description: Change autonomous & managed a/c protected zone
Remark: **TMAZNR** changes radius while **TMADH** changes height.
Example: 'TMAZNR 3.0': Use 3.0 Nm (radius) for the protected zone.

Argument	*Description*
val	Value (nm or ft)

TMS

See TAXIMAXSPEED

TMXMASTR/TMXisMaster/TMXMASTER

See MASTER

TNOLOOK

See DTNOLOOK

TPRIODRP

Arguments: time
Description: Set time to conflict at which all priorities are dropped
Example: 'TPRIODRP 30'

Argument	*Description*
Time	Delay time in seconds

TR

See TAXIRESPECT

TRACE

Arguments: acid/OFF
Description: Trace/follow aircraft on radar screen
Example: 'TRACE KL101'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
OFF	Turn off trace

TRACK/TCK

Arguments: (acid,dt/OFF) | */ALL,dt,alt | ON/OFF
Description: Track a flight in ATAC TCK file.
Remark: Only for ATAC system (see TRAFLOG for normal position logging)
Example: 'TRACK * 0.1'

Argument	*Description*
acid	Apply only to this aircraft
*/ALL	Apply to all aircraft
dt	Step time
alt	Entry altitude
ON	Turn aircraft ATAC logging on
OFF	Turn aircraft ATAC logging off

TRAFMASS

See MASS

TRAFLOG

Arguments: OFF/(ON [filename])
Description: Open or close comma delimited (CSV) traffic parameter logging file.
Remark: Data context is determined by project flag (see DATLOGTYP).
Example: 'TRAFLOG ON output.csv'

Argument	*Description*
ON	Turn on traffic parameters logging
OFF	Turn off traffic parameters logging

filename	User defined filename, otherwise scenario name will be used

TRAFLOGDT/TRFLOGDT

Arguments: [*/id], sec
Description: Sets aircraft parameter datalogging update rate
Example: 'TRAFLOGDT 1': log aircraft parameters for all aircraft at 1Hz

Argument	*Description*
*	All aircraft
Id	Apply to specific aircraft
sec	Log data to file once every *sec* seconds

TRAFRECDT/TRFRECDT

Arguments: [*/id], sec
Description: Sets aircraft parameter Ethernet recording update rate
Example: 'TRAFRECDT 1': record aircraft parameters for all aircraft at 1Hz

Argument	*Description*
*	All aircraft
Id	Apply to specific aircraft
sec	Record data over Ethernet once every *sec* seconds

TREACT

Arguments: [ULTR/FAST/NORM/SLOW/STOP], sec
Description: Set pilot model reaction delay time
Remark: Not adding a mode will imply all modes
Example: 'TREACT 30': all modes cause a reaction delay of 30 sec.

Argument	*Description*
ULTR	Setting for ultra fast reactions
FAST	Setting for fast reactions
NORM	Setting for normal reactions
SLOW	Setting for slow reactions
STOP	Setting for very slow reactions
sec	Reaction time [sec]

TREACTNO/TNOREACT

Arguments: sec
Description: Set reaction to no longer in conflict
Remark: After time has elapsed, aircraft will reengage FMS if appropriate
Example: 'TREACTNO 150': reengage normal guidance 150 sec after conflict

Argument	*Description*
sec	Reaction time [sec]

TRESO

See DTRESO

TRK

See HDG

TRKSYS

Arguments: acid/*/#, trackid/OFF/----
Description: Assign track system to aircraft
Example: 'TRKSYS # TRKS1'

Argument	*Description*
Acid	Apply to this aircraft
*/#	Apply to last created aircraft
Trackid	Id of existing track system
OFF/----	Removes track system from aircraft

TRKSYSPROC/TSP

Arguments: proc
Description: Set track system procedure
Example: 'TRKSYSPROC 23'

Argument	*Description*
proc	Track system procedure number

TURB

Arguments: lat1,lon1,lat2,lon2,L/M/S
Description: Creates a single turbulence box of Light, Medium or Severe turbulence
Example: 'TURB 30.324,-120.896,31.934,-119.98, M'

Argument	*Description*
Lat1	Latitude point 1
Lon1	Longitude point 1
Lat2	Latitude point 2
Lon2	Longitude point 2
L	Light level
M	Medium level
S	Severe level

TVALIDINT

See DTVALIDINT

TXTSTRIP

See STRIP

UNASSIGN

See ASSIGN

UNDEFWPT

Arguments: wpname
Description: Undefine/delete user defined waypoint (see DEFWPT)

Example: ‘DEFWPT FRANK’

Argument	*Description*
wpname	User defined waypoint name

UPALT/UPPALT

See SWUPALT

UPDATE/UPD

Arguments: trafid/*/ALL ON/OFF
Description: Update aircraft position and state in simulation.
Example: ‘UPD KL101 OFF’: Do not update position/state of this aircraft

Argument	*Description*
Trafid	Apply only to this aircraft
*/ALL	Apply to all aircraft
ON	Update aircraft
OFF	Do not update aircraft

UPLINK

Arguments: command, argument(s)
Description: Uplinks a command to
Example: ‘MALT FL250’: Maintain flight level 250

Argument	*Description*	
Command	1/MALT 2/CLB 3/DESC 4/ITFCLB 5/ITFDES	Maintain altitude Climb to Descend to ITF climb to ITF descend to
Argument(s)	Arguments for command	

V

See VNAV

V+/V-/V=

Arguments: none
Description: Vertical Navigation Display zoom (+&= both zoom in, - zooms out)
Example: ‘V==’ Zoom vertical display in twice

VECTOR/VEC

Arguments: TRUE/ADS/ADF | OFF/1/2/3/4
Description: Draw state vector with color coded look-ahead time
Example: ‘VECTOR ADS’: Use unfiltered ADS-B to draw vector

Argument	*Description*
TRUE	Use true traffic data
ADS	Use unfiltered ADS-B data

ADF	Use filtered ADS-B data
OFF	Turn drawing off
1-4	Use different presentations of look-ahead times

VERDIST

Arguments: [ON/OFF]
Description: Vertical Navigation Display (profile display) will either show distance ahead of ownship or distance from ownship.
Example: 'VERDIST' Toggle vertical display distance presentation

Argument	*Description*
ON	Use slant range distance from ownship
OFF	Use distance in front or behind ownship

VERZOOM

Arguments: IN/OUT
Description: Vertical Navigation Display zoom.
Example: 'VERZOOM IN'

Argument	*Description*
IN	Zoom vertical display in
OUT	Zoom vertical display out

VMETH/VRESOM/VRESOMETH

Arguments: meth
Description: Set vertical resolution method
Example: 'VMETH V/S'

Argument	*Description*
meth	V/S = vertical speed + altitude NONE = no vertical resolution method DISP = use only for display

VNAV

Arguments: acid/*/ALL, ON/OFF/TOGGLE
Description: Turn ON/OFF VNAV profile guidance
Example: 'VNAV * ON'

Argument	*Description*
Acid	Only applicable to aircraft with this callsign
*/ALL	Applicable to all aircraft
ON	Turn VNAV on
OFF	Turn VNAV off
TOGGLE	Toggles VNAV on/off

VOR/VORINFO

Arguments: vorid
Description: Retrieve information of VOR
Example: 'VOR URK'

Argument	*Description*
vorid	VOR identifier

VRFAC/VRESOFAC

See RFACV

VS

Arguments: acid, vs
Description: Manual vertical speed override
Remark: Manual override will turn off VNAV
Example: 'VS KL101 1500'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
vs	Vertical speed (x100 fpm)

VSH/VSHOLD/VH

Arguments: acid/*/ALL
Description: Altitude hold mode
Example: 'AH KL101'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/ALL	Apply to all aircraft

VSMODE

Arguments: acid/*/ALL [vertspeed/FREE/OFF/OPEN]
Description: Fix the vertical speed to 'vertspeed' or let TMX determine most suitable vertical speed based on BADA model
Example: 'DESSPD KL101 300'

Argument	*Description*
Acid	Only apply to aircraft with this callsign
vertspeed	Vertical speed
FREE/OFF	Let TMX determine most suitable vertical speed
OPEN	Let TMX determine most suitable vertical speed

WAKEVORTEX/WAKEV/WV

Arguments: [id]/OFF/(SPAN [span])
Description: Set wake vortex variable (?)
Remark: Only interface variable, no functionality
Example: 'WV SPAN 100'

Argument	*Description*
Id	Only apply to aircraft with this callsign
OFF	Reset wake variables
SPAN	Parameter to set span of aircraft

span	Span of Wake Vortex Aircraft (m)

WEAPON

Arguments: acid/*/#,weapon[,number]
Description: Set aircraft weapon
Example: 'WEAPON US101 A120 4': Arm the aircraft with 4 A-120 Amraams

Argument	*Description*
Acid	Only apply to aircraft with this callsign
*/#	Apply to last created aircraft
Weapon	Weapon type (see .\data\weapons.dat)
Number	Weapon quantity

WEB

Arguments: FULL/NOMORE/CLOSE/OPEN
Description: Inhibit or allow logging on to web session
Remark: Only applicable for web/internet functionality

Example: 'WEB OPEN'

Argument	*Description*
FULL NOMORE CLOSE	Inhibit logging on to web session
OPEN	Allow logging on

WEATHERGRID

Arguments: [filename]
Description: Opens weather file to be displayed
Example: 'WEATHERGRID weather'

Argument	*Description*
Filename	Name of the weather file

WHO

Arguments: [IS] acid/*/email
Description: Check Internet connection, either returns email address or acid
Remark: Only applicable for web/internet functionality
Example: 'WHO IS KL101'

Argument	*Description*
[IS]	Not required parameter
Acid	Aircraft identifier
*	Get all online email addresses
Email	Email address, command will return acid if found

WIND/PWIND

Arguments: lat,lon,alt,dir,spd[,alt,dir,spd,alt,...] | DEL/CLR/OFF | WX [ON/OFF]
Description: Initialize 'truth' or 'predicted' vector wind

Example: ‘WIND WX OFF’ Stop weather cells from moving with wind

Argument	*Description*
Lat,lon	Latitude / longitude of wind vector
Alt	Altitude for which wind applies
dir	Direction of wind (from) (deg)
spd	Wind speed (kts)
DEL	Delete all wind
CLR	Delete all wind
OFF	Delete all wind
WX	Parameter used to make weather cells move with wind
ON/OFF	Turn cell movement on/off

WINDGRID/WGRID

Arguments: filename
Description: Initialize 3D windgrid
Remark: Specify in the file name 'truth' or ‘predicted’. If not specified, first file will become 'truth' and second file will become ‘predicted’. Wind files need to be in active input directory.
Example: ‘WGRID ruc01_truth.wnd’

Argument	*Description*
filename	TMX specific wind format file name

WINDPROFILE

See GETWINDPROFILE

WPMUT/WPTMUT

Arguments: acid,wpname [POS/ALT/SPD] mut
Arguments: POS/ALT/SPD mut
Description: Set default mutability or that of a specific waypoint
Remark: Fix=0, Preferred=1, Mutable=2, Unconstrained=3
Example: ‘WPMUT KL101 ARTIP POS 0’, waypoint position set to FIX
Example: ‘WPMUT KL101 ARTIP 0’ all parameters set to FIX
Example: ‘WPMUT SPD 3’, speed set to unconstrained

Argument	*Description*
acid	Aircraft identifier
wpname	Waypoint identifier
POS	Position parameter
ALT	Altitude parameter
SPD	Speed parameter
mut	Mutability

WPTLABEL/ WPTLBL

Arguments: [number/OFF/TOGGLE/+/-]
Description: Toggle waypoint label information
Example: ‘WPTLBL’
Example: ‘WPTLBL 3’

Argument	*Description*
number	Set the information level number of the waypoint label
OFF	Turns waypoint labels off
TOGGLE	Cycles through waypoint label display modes
+/-	Cycles through waypoint label display modes

WPTRTA/WPRTA

See RTA

WPTSYMBOL/ WPTSYM

Arguments: [ON/OFF]
Description: Turn waypoint symbols on/off
Example: 'WPTSYM': Toggle between on/off

Argument	*Description*
ON	Turn waypoint symbols ON
OFF	Turn waypoint symbols OFF

WX/WXA/WXG/WXR

Arguments: label [,lowalt,uppalt,lat0,lon0,lat1,lon1,…]
Description: Create a weather polygon with a level of intensity or redefine polygon.
Remark: Click on the radar-screen to get the line segment points. WXA = amber, WXG = green, WXR = red
Example: 'WXG cloud 40000 45000 52.64654 2.4534 52.6545 2.6754645…'

Argument	*Description*
label	Polygon object name (to be able to delete the object)
Lowalt	Lower altitude bound
Uppalt	Upper altitude bound
Lat,lon	Latitude & longitude of segment point

WXGAIN

Arguments: value
Description: Gain on weather reflection
Example: 'WXGAIN 0.5'

Argument	*Description*
Value	Gain with which the weather should be reflected

WXGRID

See WEATHERGRID

WXMOVE[X/Y]

Arguments: value
Description: Move weather grid
Example: 'WXMOVEX 5': Moves weathergrid 5 nm in X direction
Example: 'WXMOVEY -10: Moves weathergrid 10 nm in negative Y direction

Argument	*Description*
Value	Gain with which the weather should be reflected

ZONER/ZONEDH

Arguments: val
Description: Change autonomous a/c protected zone
Remark: ZONER changes radius while ZONEDH changes height.
Example: 'ZONER 5.0': Use 5.0 Nm (radius) for the protected zone.

Argument	*Description*
val	Value (nm or ft)

ZOOM

Arguments: IN/OUT/OFF
Description: Zoom in/out on radar or navigation display
Example: 'ZOOM OFF': Reset zoom setting.

Argument	*Description*
IN	Zoom in
OUT	Zoom out
OFF	Reset viewing area to default

Reference