

EN ROUTE AUTOMATED RADAR
TERMINAL SYSTEM

TARGET GENERATOR
QUICK REFERENCE
CARD

EARTS
MOAIC/W
MSAW/CA

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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KEY

FUNCTION

SYMBOL OR IDENTIFIER

NAME

ETG CONTROL ENTRIES

<F1> through <F16>	Function Keys
<u>ACID</u>	Aircraft Identifier
<u>DABC</u>	Discrete Assigned Beacon Code
<u>TARG</u>	Target Identifier (00-63)
<u>SLEW</u>	Slew Coordinates
<u>TABL</u>	Tabular Line Identifier
Any Upper Case Letters/Numbers or Characters not underlined	Key in as Shown
<u>SENS</u>	Sensor Identifier
<u>ATIS</u>	Automatic Terminal Information Service
<u>GSI</u>	General System Info
<u>ABC</u>	Assigned Beacon Code
Controller	1 Alphabetic Character
<u>ETA</u>	Estimated Time of Arrival
<u>PTD</u>	Proposed Time of Departure
Time	Four or Six Characters as Appropriate
<u>e-e fix</u>	Entry/Exit fix (3 Characters)
<u>ARTS</u>	ARTS Identifier
< >	Single Key Entry
()	Optional Fields
[]	Field Choice (Line Separates Choices)
,	For Clarity, Not To Be Entered

Enable/disable training status
x = Enable z = Disable

Enable/disable target generator.
Caution (S) = test mode

Display/inhibit all target identifiers.
x = Display z = Inhibit

Display/inhibit target identifier

Enable/disable target position deviation.
rr = two digit range error
aa = two digit azimuth error
NOTE: Range, AZ optional for disable

Enable/disable generation of target reports on specified sensors.

Initiate/terminate scenario input
d = disc drive number
fff = file No. (1 to 3 digits.)
x = initiate z = terminate

ENTRY

< F15 >, [X | Z], M, < ENTER >

< F15 >, [X | Z], T, (S), < ENTER >

< F15 >, [X | Z], S, < ENTER >

< F15 >, [TARG | SLEW], S, [< ENTER > | < SLEW ENTER >]

< F15 >, [X | Z], N, rr, aa, (SENS), < ENTER >

< F15 >, [X | Z], C, SENS, (SENS, ---), < ENTER >

< F15 >, [X | Z], I, d, (fff), < ENTER >

FUNCTION

TARGET CONTROL ENTRIES

Target initialization

rrr = range coordinate
zzz = azimuth coordinate
hhh = desired heading
sss = desired speed
aaa = altitude desired

Initiate target at specified coordinates.

Establish target as beacon only.

Establish target as radar only.

Establish radar report quality.

j = Radar report quality 0-7

Inhibit/allow target reports.

P = inhibit beacon only.
Q = inhibit radar only.
n = number of scans inhibited 1-15

Heading command.

ccc = current value
z---z = rate degrees/second
y = rate from table this card

Speed command.

ccc = current value
z---z = rate knots/minute
y = rate from table this card

Altitude command.

ccc = current value
X = validity number
y = rate from table this card
z--z = rate feet/minute

Beacon code command.

X = validity number
Δ = Δ or ? as configured

Ident command.

Target termination

Enable/Disable automatic final approach and termination where:

aid = airport ID
rid = runway ID
G = Descend below MDA

Inhibit training target termination (missed approach)

ENTRY

< F15 >, [TARG, R, rrr, Z, zzz, (E, SENS)], < ENTER >

< F15 >, [TARG | SLEW], P, [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], Q, [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], J, j, [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], K, (n), ([P | Q]), (E, SENS), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], [H | HL | HR], ([hhh | ccc, hhh]), ([y | #Z---Z]), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], V, ([sss | ccc/sss]), ([y | #Z---Z]), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], A, ([aaa | ccc/aaa]), ([y | #Z---Z]), (Δ, X), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], B, (beacon code), (Δ, X), (W), (I), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], I, [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], N, (aid, rid, G), [< ENTER > | < SLEW ENTER >]

< F15 >, [TARG | SLEW], #, [< ENTER > | < SLEW ENTER >]

MESSAGE ERROR INDICATIONS

FORMAT	Incorrect Format Used
ILL POS	Illegal Position
ILL TRK	Illegal Track
ILL FNCT	Illegal Function
DUP ID	Duplicate Aircraft Identification
CAPACITY	Capacity Exceeded
NO SLEW	Entry Required Slew
ILL LINE	Illegal Line
DUP BCN	Duplicate Beacon
ILL CHAR	Illegal Character
OVERTEMP	Overtemp Conditions
PAR ERROR	Parity Error

TARGET SYMBOLS

- = Non-Run Length RDR or Un-tracked RDR
- + = Unassociated RDR
- × = Associated RDR
- / = Unassociated BCN or BCN/RDR Reinforced
- \ = Associated BCN or BCN/RDR Reinforced
- △ = Untracked BCN Only
- = Selected BCN or BCN/RDR Reinforced (Unassociated)

DISPLAY DATA LOSS

TKS	= Track Data Loss
HIS	= History Loss
TAB	= Store or Coast Suspend Loss
MAP	= Geo-Map/Weather/Clutter Loss

SPECIAL CONDITIONS

EM	= 7700 - 7777
RF	= 7600 - 7677
HJ	= 7500
SA	= Suspect Aircraft
CST	= No Correlation Radar or Beacon
RDR	= Correlation Radar Only
dddd	= RBC Not Equal ABC

DEFAULT CONDITIONS

TARG	= Next sequential TG
Heading	= Sensor Oriented: Heading to center of sensor. Mosaic: Heading is grid south. Slew: Heading is 0
Speed	= Velocity 00 is assigned
Airspeed	
Change Rate	= 45 KTS/MIN. is assigned
BCN Code	= 0000 is assigned
3/A validity	= 3 is assigned
Target Features	= Strong is assigned
Altitude	= Non-mode C (validity 0) assigned
Mode C	
Validity	= 3 is assigned
Noise	= 0.1 nm for range 0.33 for azimuth
Turn Rate	= 3° per second
Altitude	
Change Rate	= 2 will be assigned

TURN RATE

TR	Degree
0	= 1
1	= 1.5
2	= 2
3	= 3
4	= 4
5	= 5
6	= 6
7	= 7
F	= instantaneous

MODE C VALIDITY

MCV	Validity
0	= 0
1	= 1
2	= 2
3	= 3

ALTITUDE CHANGE RATE (SITE ADAPTABLE)

ALR	ft/s
0	= SV
1	= SV
2	= SV
3	= SV
F	= Instantaneous

MODE 3A VALIDITY

AIRSPED CHANGE RATE

ACR	kts/min
0	= 45
1	= 60
2	= 75
3	= 90
4	= 120
5	= 225
F	= instantaneous

3A	Validity
0	= 0
1	= 1
2	= 2
3	= 3