

TABLE 8C—AUXILIARY DATA—Continued

Word (See note 6)	Data content	Type of data	Maximum time be- tween trans- missions (Seconds)	Bits used	Range of values	Least sig- nifi- cant bit
	Back azimuth antenna alignment with run- way centerline.			12	–20.47° to 20.47° (See note 3) ..	0.01°
	Spare			16		
	Parity			7	(See note 1)	

NOTE 1: Parity bits I_{70} to I_{76} are chosen to satisfy the equations which follow:

For BIT I_{70} :

$$\text{Even} = (I_{13} + \dots + I_{18}) + I_{20} + I_{22} + I_{24} + I_{25} + I_{28} + I_{29} + I_{31} + I_{32} + I_{33} + I_{35} + I_{36} + I_{38} + I_{41} + I_{44} + I_{45} + I_{46} + I_{50} + (I_{52} + \dots + I_{55}) + I_{58} + I_{60} + I_{64} + I_{65} + I_{70}$$

For BIT I_{71} :

$$\text{Even} = (I_{14} + \dots + I_{19}) + I_{21} + I_{23} + I_{25} + I_{26} + I_{29} + I_{30} + I_{32} + I_{33} + I_{34} + I_{36} + I_{37} + I_{39} + I_{42} + I_{45} + I_{46} + I_{47} + I_{51} + (I_{53} + \dots + I_{56}) + I_{59} + I_{61} + I_{65} + I_{66} + I_{71}$$

For BIT I_{72} :

$$\text{Even} = (I_{15} + \dots + I_{20}) + I_{22} + I_{24} + I_{26} + I_{27} + I_{30} + I_{31} + I_{33} + I_{34} + I_{35} + I_{37} + I_{38} + I_{40} + I_{43} + I_{46} + I_{47} + I_{48} + I_{52} + (I_{54} + \dots + I_{57}) + I_{60} + I_{62} + I_{66} + I_{67} + I_{72}$$

For BIT I_{73} :

$$\text{Even} = (I_{16} + \dots + I_{21}) + I_{23} + I_{25} + I_{27} + I_{28} + I_{31} + I_{32} + I_{34} + I_{35} + I_{36} + I_{38} + I_{39} + I_{41} + I_{44} + I_{47} + I_{48} + I_{49} + I_{53} + (I_{55} + \dots + I_{58}) + I_{61} + I_{63} + I_{67} + I_{68} + I_{73}$$

For BIT I_{74} :

$$\text{Even} = (I_{17} + \dots + I_{22}) + I_{24} + I_{26} + I_{28} + I_{29} + I_{32} + I_{33} + I_{35} + I_{36} + I_{37} + I_{39} + I_{40} + I_{42} + I_{45} + I_{48} + I_{49} + I_{50} + I_{54} + (I_{56} + \dots + I_{59}) + I_{62} + I_{64} + I_{68} + I_{69} + I_{74}$$

For BIT I_{75} :

$$\text{Even} = (I_{13} + \dots + I_{17}) + I_{19} + I_{21} + I_{23} + I_{24} + I_{27} + I_{28} + I_{30} + I_{31} + I_{32} + I_{34} + I_{35} + I_{37} + I_{40} + I_{43} + I_{44} + I_{45} + I_{49} + (I_{51} + \dots + I_{54}) + I_{57} + I_{59} + I_{63} + I_{64} + I_{69} + I_{75}$$

For BIT I_{76} :

$$\text{Even} = I_{13} + I_{14} + \dots + I_{75} + I_{76}$$

NOTE 2: Code for I_{56} is: 0 = conical; 1 = planar.

NOTE 3: The convention for the coding of negative numbers is as follows: – MSB is the sign bit; 0 = + ; 1 = – .

—Other bits represent the absolute value.

The convention for the antenna location is as follows: As viewed from the MLS approach reference datum looking toward the datum point, a positive number shall represent a location to the right of the runway centerline (lateral offset) or above the runway (vertical offset), or towards the stop end of the runway (longitudinal distance).

The convention for the antenna alignment is as follows: As viewed from above, a positive number shall represent clockwise rotation from the runway centerline to the respective zero-degree guidance plane.

NOTE 4: Data Word A3 is transmitted at intervals of 1.0 seconds or less throughout the approach Azimuth coverage sector, except when back Azimuth guidance is provided. Where back Azimuth is provided transmit at intervals of 1.33 seconds or less throughout the approach Azimuth sector and 4.0 seconds or less throughout the back Azimuth coverage sector.

NOTE 5: When back Azimuth guidance is provided, transmit at intervals of 1.33 seconds or less throughout the back Azimuth coverage sector and 4.0 seconds or less throughout the approach Azimuth coverage sector.

NOTE 6: The designation “A1” represents the function identification code for “Auxiliary Data A” and address code number 1.