

2.2.3.2.7.2.8 “ENGINE OUT” Subfield in Aircraft Operational Coordination Messages

The “ENGINE OUT” subfield is a 2-bit (“ME” bits 46-47, Message bits 78-79) field used to indicate an Engine Out condition on the Aircraft. Encoding of the subfield shall be as defined in Table 2-52.

Table 2-52: “ENGINE OUT” Subfield Encoding

Coding (binary)	Coding (decimal)	Meaning
00	0	No “Engine Out” Information available
01	1	Aircraft IS NOT experiencing an “Engine Out” condition
10	2	Aircraft IS experiencing an “Engine Out” condition
11	3	This Coding IS NOT Used

2.2.3.2.7.2.9 “NOT ASSIGNED” Subfield in Aircraft Operational Coordination Messages

The “NOT ASSIGNED” subfield is a 9-bit (“ME” bit 48 through 56, Message bit 80 through 88) field that remains Unassigned and may be used for future growth.

2.2.3.2.7.3 “AIRCRAFT OPERATIONAL STATUS” Messages

The “Aircraft Operational Status” is used to provide the current status of the aircraft. Format of the message is provided in Figure 2-10, while further definition of each of the subfields is provided in the subsequent paragraphs.

"AIRCRAFT OPERATIONAL STATUS" MESSAGE "ME" FIELD												
MSG BIT #	33--37	38 ----- 40	41 ----- 56				57 ----- 72				73 --- 75	76 ----- 88
"ME" BIT #	1 --- 5	6 ----- 8	9 ----- 24				25 ----- 40				41 --- 43	44 ----- 56
FIELD NAME	TYPE =31 [5]	SUBTYPE [3]	CAPABILITY CLASS [16]				OPERATIONAL MODE [16]				Version Number [3]	NOT ASSIGNED [13]
			CC_4 [4]	CC_3 [4]	CC_2 [4]	CC_1 [4]	OM_4 [4]	OM_3 [4]	OM_2 [4]	OM_1 [4]		
	MSB LSB	MSB --- LSB	MSB LSB	MSB LSB	MSB LSB	MSB LSB	MSB LSB	MSB LSB	MSB LSB	MSB LSB	MSB ----- LSB	

Note: “[#]” provided in the Field indicates the number of bits in the field.

**Figure 2-10: “Aircraft Operational Status” ADS-B
Event - Driven Message Format**

2.2.3.2.7.3.1 “TYPE” Subfield in Aircraft Operational Status Messages

The “TYPE” subfield was previously defined for the Airborne Position Message in subparagraph 2.2.3.2.3.1 and remains the same for the Aircraft Operational Status ADS-B Event - Driven Message which uses Type Code 31.

Table 2-61: “OM_1” Encoding (Surface Operational Capability Status)

OM_1 CODING		MEANING
Bit 37, 38	Bit 39, 40	
0 0	0 0	TBD
	0 1	TBD
	1 0	TBD
	1 1	TBD
0 1	0 0	TBD
	0 1	TBD
	1 0	TBD
	1 1	TBD
1 0	0 0	TBD
	0 1	TBD
	1 0	TBD
	1 1	TBD
1 1	0 0	TBD
	0 1	TBD
	1 0	TBD
	1 1	TBD

2.2.3.2.7.3.5 2.2.3.2.7.3.5-Version Number Subfield in Aircraft Operational Status Message

The “Version Number” subfield is a 3-bit (“ME” bits 41 through 43, Message bits 73 through 75) field used to indicate the Version Number of the formats and protocols in use on the aircraft installation. Encoding of the Version Number subfield shall be as shown in Table A-21. ADS-B Receiving Subsystems conformant with this version of the 1090 MHz MOPS will initially assume a Version Number of ZERO (binary 000), until received Version Number data indicates otherwise.

2.2.3.2.7.3.6 “NOT ASSIGNED” Subfield in Aircraft Operational Status Message

The “NOT ASSIGNED” subfield is a ~~16~~¹³-bit (“ME” bits ~~41-44~~ through 56, Message bits ~~73-76~~ through 88) field reserved for future application.

2.2.3.2.7.4 RESERVED TYPE “23” ADS-B Event - Driven Messages for “TEST”

TYPE “23” ADS-B Message are Reserved Exclusively for Test Purposes.

2.2.3.2.7.5 RESERVED TYPE “24” ADS-B Event - Driven Messages for Surface System Status

TYPE “24” ADS-B Messages are Reserved for Surface System Status.

2.2.3.2.7.6 RESERVED TYPE “25” ADS-B Event - Driven Messages

TYPE “25” ADS-B Messages are Reserved for Future Expansion.