Custom OCU JAUS Messages

Code D000h: Query Visual RSTA

This message requests a Report Sensor Target Acquisition response from a Visual Sensor Component.

Field #	Name	Type	Units	Interpretation
1	Heading	Short Integer	Radians	Global Heading of Camera. Scaled Integer Lower Limit = $-\pi$ Upper Limit = π
2	Field of View	Unsigned Short Integer	Radians	Scan Angle at Heading. Scaled Integer Lower Limit = 0 Upper Limit = 2π

Code D001h: Report Visual RSTA

This message reports the results from a Target Acquisition Scan from a Visual Sensor Component.

Field #	Name	Type	Units	Interpretation
1	Image Format	Byte	N/A	0 – Unused 1 – MPEG2 2 – MPEG4 3 – MJPEG 4 – NTSC 5 – PAL 6 – TIFF 7 – JPEG 8 – GIF 9 – H263 10 – H264 11 – PNG 12 – BMP 13 – RAW 14 – PPM 15 – PGM 16 – PNM 17 – 255 Reserved
2	Image Size (m)	Unsigned Integer	Bytes	Size of image formatted image in bytes.

3 … m	Image	Byte	N/A	Format based on Field 1 (Image Data)
3 + m	Number of Targets(n)	Unsigned Short	Number	Number of targets detected by RSTA scan
4 + m … n	X Coordinate	Unsigned Short	Pixels	Left most corner coordinate of the bounding box
	Y Coordinate	Unsigned Short	Pixels	Top most corner coordinate of the bounding box
	Width	Unsigned Short	Pixels	Pixel width from X of the bounding box
	Height	Unsigned Short	Pixels	Pixel height from Y of the bounding box
	Latitude (WGS 84)	Integer	Degrees	Scaled Integer Lower Limit = -90 Upper Limit = 90
	Longitude (WGS 84)	Integer	Degrees	Scaled Integer Lower Limit = -180 Upper Limit = 180
	Altitude, (ASL)	Integer	Meters	Scaled Integer Lower Limit = -10,000 Upper Limit = 35,000