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## External Heading Update With Time (0x0D,0x1F)

Description	Provide a filter measurement from an external heading source at a specific GPS time	
Notes	<p>This is more accurate than the External Heading Update (0x0D, 0x17) and should be used in applications where the rate of heading change will cause significant measurement error due to the sampling, transmission, and processing time required. Accurate time stamping of the heading information is important.</p> <p>The heading must be the sensor frame with respect to the NED frame.</p> <p>The heading update control must be set to external for this command to update the filter; otherwise it is NACK'd. Heading angle uncertainties of <math>\leq 0.0</math> will be NACK'd</p> <p>Please refer to your device user manual for information on the maximum rate of this message.</p> <p>On -25 models, if the declination source (0x0D, 0x43) is not valid, true heading updates will be NACK'd. On -45 models, if the declination source is invalid, magnetic heading updates will be NACK'd.</p>	
Parameter Name	Data Type	Description
Field Length	u8	21
Descriptor	u8	0x1F
Gps Time	<a href="#">double</a>	[seconds]
Gps Week	<a href="#">u16</a>	[GPS week number, not modulus 1024]
Heading	<a href="#">float</a>	Relative to true north, bounded by $\pm\pi$ [radians]
Heading Uncertainty	<a href="#">float</a>	1-sigma [radians]
Type	<a href="#">u8</a>	1 - True, 2 - Magnetic
Ack/Nack Reply	<a href="#">See standard MIP ack/nack reply format.</a>	

