Appendix E – Track Files

Track File Header

Description	Data Type	Bits	Notes
Track File Version	Integer	32	
Number Of Segments	Integer	32	
Number of Points for First Segment	Integer	32	
ROP Header 01	Structure	N/A	See ROP Header format.
Point Header 01	Structure	N/A	See Track Header format.
Point Header 02	Structure	N/A	See Track Header format.
Point Header ...	Structure	N/A	See Track Header format.
Point Header N	Structure	N/A	See Track Header format.
Number of Points for Second Segment	Integer	32	
ROP Header 02	Structure	N/A	See ROP Header format.
Point Header 01	Structure	N/A	See Track Header format.
Point Header 02	Structure	N/A	See Track Header format.
Point Header ...	Structure	N/A	See Track Header format.
Point Header N	Structure	N/A	See Track Header format.
Number of Points for Third Segment	Integer	32	
ROP Header 02	Structure	N/A	See ROP Header format.
Point Header 01	Structure	N/A	See Track Header format.
Point Header 02	Structure	N/A	See Track Header format.
Point Header ...	Structure	N/A	See Track Header format.
Point Header N	Structure	N/A	See Track Header format.
.			.
.			.
.			.
(Pattern Repeats)			(For each Segment)

Paul Borrman (PTB) 12/08/17

Frank Randazzo/GSMR2/8 Dec 17

Radar Operating Period (ROP) Header

Description	Data Type	Bits	Notes
ROP Version	Integer	32	
String Length	Integer	32	Length of the next field in bytes.
Raw File Name	Char	*	Name of "RAW" file.
Raw Fie Size	Integer	32	
RF Input Channel	Integer	32	
RF Band Width	Integer	32	
Base Line Separation	Float	32	
Delay Bias	Float	32	
Elevation Angle	Float	64	
Steering Angle	Float	64	
RF Frequency	Float	32	
Calibration Frequency	Float	32	
Operation Mode	Integer	32	
Sweep Rate	Integer	32	
Sweep Delay	Float	32	
Channel A Attenu.	Integer	32	
Channel B Attenu.	Integer	32	
Video Amplitude	Integer	32	
Video Filter	Integer	32	
Sync Check Flag	Integer	32	
Sweep Band Width	Integer	32	
String Length	Integer	32	
AOI String	Char	*	Area Of Interest String
Start Seconds	Unsigned	32	
Start Milli Secs.	Integer	16	
Stop Seconds	Unsigned	32	
Stop Milli Secs.	Integer	16	
Data Type	Integer	32	
Pulse Rep. Freq.	Float	32	
Center Recorded Rng	Float	32	
Max Recorded Range	Float	32	
Min Recorded Range	Float	32	
Max Unambiguous Rng	Integer	32	
Pointer Per Sweep	Integer	16	

Continue: Radar Operating Period (ROP) Header

Description	Data Type	Bits	Notes
Antenna Type	Integer	32	
Number Range Bins	Integer	32	
Injection Level	Integer	32	
Mechanical Bore Sight	Float	64	
Boresight Azimuth	Float	64	
ARI Factor	Float	32	
ARI	Float	32	
Bev Type	Integer	32	
Beam Element	Integer	32	
Receiver Beamwidth	Float	64	
Transmitter Power	Interger	32	
Transmit Chain	Integer	32	
Tx Antenna ID	Integer	32	
Tx Beam Azimuth	Float	32	
Transmitter	Integer	32	
Exciter Frequency	Float	32	
Exciter Sweep Rate	Integer	32	
Exciter OP Mode	Integer	32	
MGC Gain	Float	32	
Sidelobe Level	Integer	32	
BFN ID	Integer	32	
Receiver ID	Integer	32	
Sounder ID	Integer	32	
Subclutter Vis.	Float	32	
Local Noise	Float	32	
Peak Power	Float	32	
Collection Type	Integer	32	

Point Header

Description	Data Type	Bits	Notes
Version Number	Integer	32	
Amplitude	Float	32	
Doppler	Float	32	
Measured Doppler	Float	32	
Doppler Width Low	Float	32	
Doppler Width High	Float	32	
Integrated Velocity	Float	32	
Noise	Float	32	
Total Phase	Float	32	
Phase Jitter	Float	32	
SNR	Float	32	
True Radar Range	Float	32	
True Radar Range Low	Float	32	
True Radar Range High	Float	32	
Velocity	Float	32	
Velocity Width Low	Float	32	
Velocity Width High	Float	32	
Start Time Seconds	Unsigned Integer	32	
Start Time Milliseconds	Integer	16	
Alt Integrated Velocity	Float	64	
Alt Radar Range	Float	64	
Alt Velocity	Float	32	
Drv. Azimuth	Float	64	Derived Value
Drv. Azimuth Alt	Float	64	Derived Value
Drv. Rx Elevation	Float	64	Derived Value
Drv. Tx Elevation	Float	64	Derived Value
Drv. Target Ray Range	Float	64	Derived Value
Drv. Target Reflect Angle	Float	64	Derived Value
Drv. Rx Ground Range	Float	64	Derived Value
Drv. Tx Ground Range	Float	64	Derived Value

Drv. Rx Ground Range Alt	Float	64	Derived Value
Drv. Rx Path Length	Float	64	Derived Value
Drv. Tx Path Length	Float	64	Derived Value
Drv. Virtual Height	Float	64	Derived Value
Drv.. Vertical Velocity	Float	64	Derived Value
Drv. Valide Velocity	Integer	32	Derived Value