## **Topcon Technical Support**

- Writer: Javier Ramirez
- Product: Magnet and Robotic Total Stations

Data collection and Reports using Magnet products and Robotic Total Stations.

Step 1 Create a Point list...... What Points we need to monitor...

Set up a list of points, this list of point can be built with imported points, surveyed points or calculated points. And set as Control Points.



Croate the point list

				create the p				
Add F	Point List			V X	List of Point Lists			71
Point List					Name		A	so usit
	Name	Monitoring			Monitoring			A
	Points	Codes	20 USR					1
	A 101	CP						0
	A 102	CP	1.5					in state
	A 103	CP	<i>t</i> )				*	= 5 USIT
	A 104	CP						
	A 105	CP	E E					
+	<b>A</b> 106	СР		•				
1000			23228/3975		Delete	Profes		
	1		Add Points -		Desete	Edit	Сору	Add

Magnet offers a few horizontal and vertical views of the point list. Sequence of points can also be arranged by using the UP and Down arrows.



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Step 2 Orient the instrument, and Start Module...... Let's do this thing! ...

Orient the instrument will be necessary, if not already done so.



Point List	Monitoring		
Points	Codes	20 USft	
<b>101</b>	СР	N. N	
<b>A</b> 102	CP		
A 103	CP		
<b>A</b> 104	CP	· /	
A 105	CP	4	
<b>A</b> 106	CP		

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So once we are ready to start...... Push the start button.



Point number will be gray out since observations will be link as check shots.

Time that instrument will

Monitor EDM E S Point 100

Cycle Time
0

Auto
On

Press Start when ready
HA 0°00'02.0", VA 86°43'47.0"
Kart Button

Using this options will allows to easy create a report in Magnet Tools

as well to view the points and delta values for XYZ in Magnet field.

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One you start with this configuration the instrument will go as long as the user allows it, and you can stop this application on any moment, using the stop button.

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Also is important to know that if a target is blocked, the software will attempt to find the target 2 more times, and if the target is not sighted, then it will created a record that the target was not available.

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Once we obtain as many cycles as needed, all data observation can be seems under edit points in the check shots tab as well as the raw data.

#### Example of collected points using the "Store as check point" option

Edit Point	111		V X	et Edit Po	oint						
t Layer/Style	Check Points Image	•		Point Lay	er/Style (	Sheck Pol	nts Image	1			
Point	101	Control Point		Name	dN	dE	dH	North	East	Elev	Note
_	1	÷		101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
) Code	1994 (B			101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
				101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
ocal(USft)		Note		101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
North	970.212		84	101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
	100000000			101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
East	1997.535			101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
Elevention	505 853			101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
Elevation	303,633			101	-0.001	0.003	-0.012	970.213	1997.532	505.865	101
				101							

This allows for a quick analysis and preview of the data.

Also know that if desired you can measure the targets Direct and Reverse by simply......

C Measure reverse distant	Direct/Reverse ce Hz Direct/Reverse VA	5.0 0.0200 5.0	sec USft sec
CMeasure reverse distant CAuto accept measurement	or Hz ent Dist. VA	5.0 0.0200 5.0	sec USft sec
Auto accept measurem	ent Dist. VA	0.0200 5.0	USft sec
	VA	5.0	Sec
		hairt de	1.222
			Next->
		-	
🖷 🚖 🛄 🖪 属	Andlikeli		
×			
Wrect/Reverse	•		
	-		
Tolerances			
Hz 5.0 sec			
Dist. 0.0200 USR			
VA 5.0 cor			
VA JOU SOL			
	wrect/Reverse	Vect/Reverse	Wrect/Reverse

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#### Step 3 Create the report... Time to share...

For the first time executing a report we must first have the report configuration of the data that we want to include in the report.

Report	ort	Report	tion   Add New	Report	
	Report Configuratio	n figuration		9	
	Reports Points Post Adjustment	Quality C	antrol 🕅 MONITOR		
	*	v Adj report	erepot Copy report as	Execute	
	Report tem templates		Included report items	Move Up	
	Occupation View Point Summary Project Repeated Observations States Oct Line or Am	35	Project Point Summary Check Shots Map View	Move Dawn Remove	
	Stake Out Points Stake Out Road	+		Options	
	Hepot formal HTML Microsoft Word Microsoft Excel PDF				
			Close		
Report item t	emplates:		Included rep	oort items:	Move Up
Observation Occupation Point Summ Project	View View Jary	>>>	Project Point Sum Check Sho	nary ts	Move Dov
Repeated C Stake Out I Stake Out I	Deservations ine or Arc Points		Map View		Remove



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Offering a clean ready look to share the information or to do further analysis.



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#### Sample of report on HTML format:

Project MCNuTOR Truget rumm: Stanisoring Truget rumm: Stanisoring Truget rumm: Stanisoring Truget of the Top Series Sector Series Trugeton Sector MSS 584 Sector Truge Series Galaxt MSS 584 Sector Truge Series GMET Standard Times

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Norm:	Ground Northing (5/5/1)	Ground Casting III Sto	Elevation (USN)	Code
1	1008/000	2000.000	590.000	09
100	801.515	2000.000	400.955	CP
101	870.232	1997.525	505.003	CI6
102	1011394	2001.099	106.443	CP
103	1005239	2006.211	106.110	CP
104	\$73.329	2013.367	504.621	QP.
105	942.758	2004 731	596,854	. QP
106	806 795	2000 738	557 100	CP.
107	678.213	1997.534	845,853	
108	1011994	2001.100	506.443	
109	1008.234	2008.252	586.110	
110	073.320	2013.385	304.621	

						Chick Shots						
Durage Point	Checked Point	Code	Ground Northing (USR)	Ground Lauting (USH)	Elevation (U.SR)	Chicked Ground Northing (USR)	Checked Growid Earling (USI)	Checkell Elwation (USB)	BN (USM	dt (visti)	enniti sm	Casjusto
90.1	181 check 1	0P	970.212	1997,535	505,953	870.213	1947 532	525.865	0.021	-8.003	0.012	3 00 5
101	101 check 2	CP	978.212	107.535	505.853	879.213	1967 532	505.805	0.021	-0.005	0.017	0.000
101	101 check 3	CP	978.212	1997.635	905.853	870.213	1967.532	505.805	0.001	-0.003	0.012	0.000
40.5	101 chept 4	CP.	972212	1997.535	505 853	\$70.253	1907.532	525 265	0.001	-D.0003	0.012	12.000
90.1	101 check S	CP	979.212	1897.535	606.863	#70.213	1947.532	505.800	0.001	+0.003	0012	0.000
90.1	101 check 0	CP!	970.212	1007.535	506-853	070.213	1867.532	505.805	0.001	-0.003	0.012	U.00E
701	101 check 7	10P	970.212	1997.535	505-843	\$70.213	1957.532	525.005	0.081	-0.003	0.042	9.001
101	101 check 8	CP	970.312	1007.535	606.852	870.213	1967.532	525 262	0.001	-0.003	0.012	0.000
10.1	101 check 8	CP.	978.212	1997.535	506.863	870.213	1947.532	585.865	0.001	0.003	0012	0.000
10.1	101 check 10	CP	979.242	1997.535	508-853	870.213	1967.532	585.605	100.0	-0.003	0.012	0.005
101	101 check 11	CP.	970.212	1007.535	505-853	870.213	1267 532	505 865	0.001	-0.003	0012	0.000
	and the second se											and the second se

Notice the red items this is done by setting up tolerences for the points preciotions if the value goes above the determine precsion it will be displayed in red.

E Duplay E Coordinate Systems	TS Ots Precisions	GPS Obs Precisions Point Precisions	Automatic Tests DL Obs Precisions
Equipment Save Process Linescok Linescok GPS-PentProcess Control Control	Static Honzontal Precision (USM) Static Ventical Precision (USM) Nonematic Honzontal Precision (USM) Romantic Ventical Precision (USM) Localization Honzontal Precision (USM) Localization Ventical Precision (USM)		10.012 10.000145 10.06562 10.16454 10.16454 10.16454 10.12808
ave configuration List configurations	OK		Cancel

#### Job Configuration | Quality Control | Point Precisions |

#### Happy Surveying!