


PEANUT calculations

The background features three stylized line drawings of peanuts, arranged from left to right and slightly overlapping. Each drawing shows the characteristic pointed shape of a peanut shell with a zigzag line representing the seam. The drawings are rendered in a light gray color.

Here to help you save time to tackle other endeavors!

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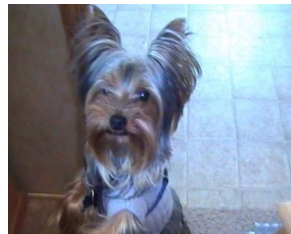
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BY THE WAY HERE'S PEANUT

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DIRECTIONS FOR THE TARGET METHOD SAG PROGRAM

TO ALL USERS,

We would like to thank you for your purchase and use of this program and the other programs in this series. We have set a goal at Peanut Calculations to save the person in charge of these job tasks in the field time. Because we know your time is valuable and if you like me there's not enough of it. With a few values entered from the sag charts, names, job name, company names, date, and temperatures all the calculations and reports are ready to print. A lot of the job, personnel names, company names and P.O. numbers only have to be entered once at the beginning of a project. If you have any questions or ideas about something you would like to see in this program or others please leave us a message at support@peanutcalculations.com or e-mail me at norman@peanutcalculations.com. We are here to support and help you with these programs and your ideas to make your job easier. But please remember these programs have copy rights so please use for your benefit but don't give unauthorized copies to others. If there is anyway we can support or help please contact us.

THANK YOU
NORMAN S. JAYJOHN
PRESIDENT OF PEANUT CALCULATIONS

PLEASE KEEP ONE COPY OF EACH PROGRAM IN A FILE TO MAKE A COPY FOR EACH PROJECT WORKED.

Disclaimer,

Please double check your input data and finished data to make sure program is working correctly. Peanut Calculations excepts no liability for miss information from our programs.

SHEET 1

DATA INPUT & SAG SHEET

With this sheet you enter known data in the yellow highlighted cells and the program does the calculations and report for you. The known data is, who's line, job name, contractor or crew name, P.O. or job number, who the sagger are and the high and low temperatures and sag in feet for the high and low temperatures for the span or spans you have chose to sag in from the engineers sag chart. Enter the line section being sagged, the span being sagged, the span length, ruling span length, sag chart number, and finally the ambient temperature at the time of sag. The sag calculations are complete and with a few more data items entered for each sag location sheet you are using your printable measurement sheet and sag report sheet will be complete and ready to print.

sample conductor sag chart from project engineer

sag chart 1 of 27
ruling span 1387.6

figure 1 ---

Structure Number	Span Length Ahead (ft)	Temperature						
		40 F	50 F	60 F	70 F	80 F	90 F	100 F
		Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)
2	1477.5	54.29	55.03	55.76	56.49	57.22	57.94	58.67
3	1333.8	44.23	44.83	45.42	46.02	46.61	47.20	47.79
4	1252.7	39.01	39.54	40.06	40.59	41.11	41.63	42.15
5	1442.1	51.72	52.42	53.11	53.81	54.50	55.19	55.88
6	1146.2	32.65	33.09	33.53	33.97	34.40	34.84	35.28
7	1413.9	49.71	50.39	51.05	51.73	52.39	53.05	53.72
Tension	(lbs)	5504	5430	5359	5290	5223	5158	5095

(Numbers from actual issued sag chart)

sample shield wire sag chart from project engineer

sag chart 1 of 27
ruling span 1387.6

figure 2---

Structure Number	Span Length Ahead (ft)	Temperature						
		40 F	50 F	60 F	70 F	80 F	90 F	100 F
		Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)
2	1477.5	42.98	43.58	44.15	44.72	45.29	45.87	46.43
3	1333.8	35.02	35.50	35.97	36.44	36.90	37.37	37.83
4	1252.7	30.89	31.31	31.72	32.14	32.55	32.96	33.36
5	1442.1	40.94	41.51	42.05	42.60	43.14	43.69	44.23
6	1146.2	25.83	26.19	26.54	26.88	27.22	27.57	27.91
7	1413.9	39.33	39.88	40.40	40.93	41.45	41.97	42.49
Tension	(lbs)	1735	1712	1689	1668	1647	1626	1607

(Numbers from actual issued sag chart)

1. Press the DATA INPUT & SAG tab at the bottom of the program to activate the sheet. Then enter names, job number, sag section structure numbers, weather conditions, ruling span length and sag chart number in yellow highlighted area's. Example used in figure 3

WHO'S LINE	GEORGIA POWER COMPANY		JOB NAME	McGraw FORD TO CRESTVIEW 500 KV LINE		figure 3
DATE	12/22/2007		JOB # or P.O-----	P7891		
CONTRACTOR	WILSON CONSTRUCTION		AMBIENT TEMPERATURE-----			
WHO'S SAGGING	1	NORMAN JAYJOHN				
	2	KENNETH MITCHAM				
	3	JACK LYONS				
LINE SECTION TO BE SAGGED: -----STRUCTURE-----			2	TO STRUCTURE-----	8	WEATHER-- SUNNY/CALM
1. SAG SPAN-----			SPAN LENGTH-----		HIGH TEMPERATURE USED FROM SAG CHART-----	
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					LOW TEMPERATURE USED FROM SAG CHART-----	
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					RULING SPAN LENGTH----- 1387.60	
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					SAG CHART NUMBER----- 1 of 27	
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					answer	
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					answer	
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----					answer	
2. SAG SPAN-----			SPAN LENGTH-----			
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					answer	
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					answer	
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					answer	
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					answer	
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					answer	
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----					answer	

Figure 3 was shortened one sag location to save space, the third one on the data input page works the same as the other two.

2. After you finish with data above, look at your sag chart and enter the high temperature and the low temperature listed on the chart and enter temperatures in the proper yellow highlighted cells. This program will work with any temperature range given on the sag charts. The total temperature range works fine as long as the engineers sag chart follows a linear progression. If his chart doesn't you will have to use a smaller range. Like 60 to 80 degrees. You will have to check and see if this program is following the sag chart. When you enter 100 degrees and 40 degrees with this sample sag chart, you can check any published sag in feet from the chart. Like 50, 60, 70, 80, or 90 degrees. Check your sag chart the same way.

example sag chart temperature range-----

from figure 1 or 2-----

Temperature						
40 F	50 F	60 F	70 F	80 F	90 F	100 F
low temperature			high temperature			

from figure 3-----

HIGH TEMPERATURE USED FROM SAG CHART-----	100
LOW TEMPERATURE USED FROM SAG CHART-----	40

3. The next step we will work on is entering the sag span, span length, conductor sag in feet for the high and low temperature on the sag chart, and shield wire sag in feet for the high and low temperature on the sag chart.

Chosen sag spans and sag in feet for high and low temperatures in red.

figure 1 ---

sample conductor sag chart from project engineer		Temperature						
Structure Number	Span Length Ahead (ft)	40 F	50 F	60 F	70 F	80 F	90 F	100 F
		Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)
2	1477.5	54.29	55.03	55.76	56.49	57.22	57.94	58.67
3	1333.8	44.23	44.83	45.42	46.02	46.61	47.20	47.79
4	1252.7	39.01	39.54	40.06	40.59	41.11	41.63	42.15
5	1442.1	51.72	52.42	53.11	53.81	54.50	55.19	55.88
6	1146.2	32.65	33.09	33.53	33.97	34.40	34.84	35.28
7	1413.9	49.71	50.39	51.05	51.73	52.39	53.05	53.72
Tension	(lbs)	5504	5430	5359	5290	5223	5158	5095

low temperature high temperature

sag point 1

sag point 2

Chosen sag spans and sag in feet for high and low temperatures in red.

figure 2---

sample shield wire sag chart from project engineer		Temperature						
Structure Number	Span Length Ahead (ft)	40 F	50 F	60 F	70 F	80 F	90 F	100 F
		Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)	Sag in (ft)
2	1477.5	42.98	43.58	44.15	44.72	45.29	45.87	46.43
3	1333.8	35.02	35.50	35.97	36.44	36.90	37.37	37.83
4	1252.7	30.89	31.31	31.72	32.14	32.55	32.96	33.36
5	1442.1	40.94	41.51	42.05	42.60	43.14	43.69	44.23
6	1146.2	25.83	26.19	26.54	26.88	27.22	27.57	27.91
7	1413.9	39.33	39.88	40.40	40.93	41.45	41.97	42.49
Tension	(lbs)	1735	1712	1689	1668	1647	1626	1607

low temperature high temperature

sag point 1

sag point 2

If the engineer has you adding or subtracting sag corrections you need to add or subtract from the sag in feet from your sag chart before you enter them in the DATA INPUT & SAG sheet

Data Input & Sag sheet with sag data entered from sag charts.

1. SAG SPAN-----		3-4	SPAN LENGTH-----	1333.8	HIGH TEMPERATURE USED FROM SAG CHART-----	100
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----				47.79	LOW TEMPERATURE USED FROM SAG CHART-----	40
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----				44.23		
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					answer	
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART---				37.83		
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART---				35.02		
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----					answer	
2. SAG SPAN-----		5-6	SPAN LENGTH-----	1442.1		
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----				55.88		
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----				51.72		
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					answer	
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART---				44.23		
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART---				40.94		
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----					answer	

RULING SPAN LENGTH-----	1387.60
SAG CHART NUMBER-----	1 of 27

figure 3
with data entered

4. The last step for this page is to input the ambient temperature and the program will do all the calculations for you.

Now on the data input & sag sheet, enter the ambient temperature at this time.

AMBIENT TEMPERATURE-----	86
--------------------------	----

figure 4

If temperature at time of sag is 86 F enter here on the data input & sag sheet

A. YOU HAVE TO CLICK OUTSIDE THE LAST CELL DATA WAS ENTERED IN FOR IT TO TAKE AFFECT AND WORK.

B. You have to stay within the sag charts temperature range or your answers will zero their selves as a safety factor. This forces you the user to stay within the engineers issued charts and alleviates any errors in what is wanted by the engineer. Try it by using values used here, 100 for high and 40 for low then enter 39 degrees or 101 degrees in the ambient temperature and all sag values turn to zero. This program will work on any temperature range. What ever temperatures in Fahrenheit the issued sag chart is using.

There is no need to print this page. All the figures you should need for this program are on the sag report or the printable measurement sheet.

WHO'S LINE	GEORGIA POWER COMPANY		JOB NAME	McGraw FORD TO CRESTVIEW 500 KV LINE		figure 3
DATE	12/22/2007		JOB # or P.O-----	P7891		complete and answered
CONTRACTOR	WILSON CONSTRUCTION		AMBIENT TEMPERATURE----- 86			
WHO'S SAGGING	1	NORMAN JAYJOHN				
	2	KENNETH MITCHAM				
	3	JACK LYONS				
LINE SECTION TO BE SAGGED: -----STRUCTURE-----			2	TO STRUCTURE-----	8	WEATHER-- SUNNY/CALM
			HIGH TEMPERATURE USED FROM SAG CHART-----		100	
1. SAG SPAN-----			3-4	SPAN LENGTH-----	1333.8	LOW TEMPERATURE USED FROM SAG CHART-----
						40
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					44.79	
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					44.23	
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					46.96	answer
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART---			37.83			
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART---			35.02			
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----			37.17		answer	
2. SAG SPAN-----			5-6	SPAN LENGTH-----	1442.1	
CONDUCTOR SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART-----					55.88	
CONDUCTOR SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART-----					51.72	
ACTUAL SAG IN FEET NEEDED FOR CONDUCTOR-----					54.91	answer
SHIELD WIRE SAG IN FEET FOR THE HIGH TEMPERATURE FROM CHART---			44.23			
SHIELD WIRE SAG IN FEET FOR THE LOW TEMPERATURE FROM CHART---			40.94			
ACTUAL SAG IN FEET NEEDED FOR SHIELD WIRE-----			43.46		answer	
			RULING SPAN LENGTH-----		1387.60	
			SAG CHART NUMBER-----		1 of 27	

Figure 3 was shortened one sag location to save space, the third one on the data input page works the same as the other two.

SHEET 2,3, & 4

DATA INPUT TARGETS, SAG POINT 1, 2, & 3

1. DATA INPUT TARGETS, SAG POINT 1, 2, & 3 are sheets that calculate your target measurements for three different sag points. After entering some more data these sheets will calculate target measurements for the use of target boards or ribbon targets, for conductor and shield wire or either one by their selves. By entering a proposed ambient temperature you can make target boards with 30 degrees of targets so you can hang them before you sag. Here is an example of one of these sheets and the data you need to enter.

SAG POINT 1 FROM PAGE 1

SAG SPAN-	0	INSTRUMENT ON STRUCTURE---		CONDUCTOR INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-	
SAGGER---	0	TARGET ON STRUCTURE-----		SHIELD WIRE INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-	
PROPOSED AMBIENT TEMPERATURE FOR TIME OF SAGGING, TO 5 DEGREE'S, 70, 75, 80, ECT.-----		CONDUCTOR SAG AT PROPOSED AMBIENT TEMPERATURE---	0.00		
TEMPERATURE RANGE IS 15 DEGREES LOWER AND 15 DEGREES HIGHER THAN PROPOSED AMBIENT.		SHIELD WIRE SAG AT PROPOSED AMBIENT TEMPERATURE---	0.00		
TEMPERATURE RANGE PROPOSED-----	0	0	0	0	0
CONDUCTOR TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----	0.00	0.00	0.00	0.00	0.00
CONDUCTOR MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----	START TOP	0.00	0.00	0.00	0.00
SHIELD WIRE TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----	0.00	0.00	0.00	0.00	0.00
SHIELD WIRE MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----	START TOP	0.00	0.00	0.00	0.00
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR CONDUCTOR, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----	0.00	answer			
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR SHIELD WIRE, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----	0.00	answer			
CONDUCTOR TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----	0.00	answer	ACTUAL AMBIENT TEMPERATURE---	0	
SHIELD WIRE TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----	0.00	answer			

figure 5 without data entered

2. Enter the data ask for in the yellow highlighted areas, these are which structure you plan to put your transit or sag scope, the structure number you plan to install a target board or targets, the distance you plan to set up your instrument below the conductor and shield wire in their traveler or attachment. Finally the last data in put you have to do is the proposed ambient temperature. This temperature should be within 15 degrees of the temperature at the time you plan to sag. After the proposed ambient temperature is entered this sheet will calculate temperature and target measurements in 5 degree increments for 15 degrees below and 15 degrees above the proposed ambient temperature. Sample supplied here has data from the DATA INPUT & SAG sheet used above in these directions.

SAG POINT 1 FROM PAGE 1									
SAG SPAN-	3-4	INSTRUMENT ON STRUCTURE---	3	CONDUCTOR INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-					50.00
SAGGER---	NORMAN JAYJOHN	TARGET ON STRUCTURE-----	4	SHIELD WIRE INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-					35.00
PROPOSED AMBIENT TEMPERATURE FOR TIME OF SAGGING, TO 5 DEGREE'S, 70, 75, 80, ECT.-----				85	CONDUCTOR SAG AT PROPOSED AMBIENT TEMPERATURE---				46.90
TEMPERATURE RANGE IS 15 DEGREES LOWER AND 15 DEGREES HIGHER THAN PROPOSED AMBIENT.				SHIELD WIRE SAG AT PROPOSED AMBIENT TEMPERATURE---				37.13	
TEMPERATURE RANGE PROPOSED-----		70	75	80	85	90	95	100	answer
CONDUCTOR TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----		42.19	42.76	43.33	43.90	44.47	45.05	45.63	answer
CONDUCTOR MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----		START TOP	0.57	0.57	0.57	0.58	0.58	0.58	answer
SHIELD WIRE TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----		37.88	38.36	38.84	39.32	39.80	40.28	40.77	answer
SHIELD WIRE MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----		START TOP	0.48	0.48	0.48	0.48	0.48	0.49	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR CONDUCTOR, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----								42.19	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR SHIELD WIRE, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----								37.88	answer
CONDUCTOR TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----				44.01	answer	ACTUAL AMBIENT TEMPERATURE---		86	
SHIELD WIRE TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----				39.41	answer				

figure 5 with data entered

SHEET 2,3, & 4

INPUT & TARGETS, SAG POINT 1, 2, & 3

3. These sheets are your reference points for sag setup. They are all independent of each other. If you go outside of the chart sag temperature range on these sheets with your proposed ambient temperature they will show the high temperature, or the low temperature more than once in the temperature range and the target measurements forcing you to stay in that range. If the high temperature entered on the DATA INPUT & SAG sheet is 100 degrees and the low is 40 like the example used above the highest temperature you could use in the proposed ambient temperature would be 85 degrees and the lowest temperature you could use in the proposed ambient temperature would be 55 degrees. This is because the program is calculating temperatures and target measurements 15 degrees above and 15 degrees below the proposed ambient temperature.

HERE ARE A COUPLE OF EXAMPLES OF TO HIGH AND TO LOW OF A PROPOSED AMBIENT TEMPERATURE USED

TO HIGH PROPOSED AMBIENT TEMPERATURE

SAG POINT 1 FROM PAGE 1									
SAG SPAN-	3-4	INSTRUMENT ON STRUCTURE---	3	CONDUCTOR INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-					50.00
SAGGER---	NORMAN JAYJOHN	TARGET ON STRUCTURE-----	4	SHIELD WIRE INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-					35.00
PROPOSED AMBIENT TEMPERATURE FOR TIME OF SAGGING, TO 5 DEGREE'S, 70, 75, 80, ECT.-----			90	CONDUCTOR SAG AT PROPOSED AMBIENT TEMPERATURE---					47.20
TEMPERATURE RANGE IS 15 DEGREES LOWER AND 15 DEGREES HIGHER THAN PROPOSED AMBIENT.				SHIELD WIRE SAG AT PROPOSED AMBIENT TEMPERATURE---					37.36
TEMPERATURE RANGE PROPOSED-----		75	80	85	90	95	100	100	answer
CONDUCTOR TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----		42.76	43.33	43.90	44.47	45.05	45.63	45.63	answer
CONDUCTOR MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----		START TOP	0.57	0.57	0.58	0.58	0.58	0.00	answer
SHIELD WIRE TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----		38.36	38.84	39.32	39.80	40.28	40.77	40.77	answer
SHIELD WIRE MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----		START TOP	0.48	0.48	0.48	0.48	0.49	0.00	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR CONDUCTOR, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----								42.76	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR SHIELD WIRE, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----								38.36	answer
CONDUCTOR TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----			44.01	answer	ACTUAL AMBIENT TEMPERATURE---		86		
SHIELD WIRE TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----			39.41	answer					

figure 5

TO LOW OF A PROPOSED AMBIENT TEMPERATURE

SAG POINT 1 FROM PAGE 1		40 DEGREES TEMPERATURE AND TARGET MEASUREMENTS SHOWN FOUR TIMES TO HELP KEEP YOU WITHIN THE ENGINEERS SAG CHART								
SAG SPAN-	3-4	INSTRUMENT ON STRUCTURE---	3	CONDUCTOR INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-				50.00		
SAGGER---	NORMAN JAYJOHN	TARGET ON STRUCTURE-----	4	SHIELD WIRE INSTRUMENT DISTANCE BELOW BOTTOM OF WIRE GROOVE IN BLOCK-				35.00		
PROPOSED AMBIENT TEMPERATURE FOR TIME OF SAGGING, TO 5 DEGREE'S, 70, 75, 80, ECT.-----			40	CONDUCTOR SAG AT PROPOSED AMBIENT TEMPERATURE---				44.23		
TEMPERATURE RANGE IS 15 DEGREES LOWER AND 15 DEGREES HIGHER THAN PROPOSED AMBIENT.			SHIELD WIRE SAG AT PROPOSED AMBIENT TEMPERATURE---				35.02			
TEMPERATURE RANGE PROPOSED-----			40	40	40	40	45	50	55	answer
CONDUCTOR TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----			38.81	38.81	38.81	38.81	39.37	39.93	40.49	answer
CONDUCTOR MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----			START TOP	0.00	0.00	0.00	0.56	0.56	0.56	answer
SHIELD WIRE TARGET MEASUREMENT BELOW BOTTOM OF WIRE GROOVE IN THE BLOCK FOR EACH TEMPERATURE USED IN THE RANGE ABOVE IN FEET-----			35.04	35.04	35.04	35.04	35.51	35.98	36.45	answer
SHIELD WIRE MEASUREMENT BETWEEN EACH 5 DEGREES FOR YOUR TARGET BOARD, FROM YOUR LOW TEMPERATURE TO YOUR HIGH TEMPERATURE PROPOSED-----			START TOP	0.00	0.00	0.00	0.47	0.47	0.47	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR CONDUCTOR, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----									38.81	answer
MEASUREMENT TO PUT LOW TEMPERATURE MARK OF TARGET BOARD ON TOWER FOR SHIELD WIRE, BELOW BOTTOM OF WIRE GROOVE IN BLOCK-----									35.04	answer
CONDUCTOR TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----			44.01	answer	ACTUAL AMBIENT TEMPERATURE---		86			
SHIELD WIRE TARGET LOCATION FOR ACTUAL AMBIENT TEMPERATURE FOR REPORT-----			39.41	answer						

REMEMBER 15 DEGREES ABOVE AND 15 DEGREES BELOW SAG CHART TEMPERATURES TO STAY WITHIN THE SAG CHART RANGE

figure 5

If the high temperature on the chart is 120 degrees the highest proposed temperature you should use is 105 degrees and lets say the low temperature on the chart is - 20 degrees the lowest proposed temperature you should use is - 5 degrees. The 15 degree rule.

SAG REPORT

1. After the data input & sag sheet and the input & targets, sag point sheets that you need are complete and answered all you have to do is click on the SAG REPORT tab at the bottom of this program and click print. Your sag data is complete and ready to sign and turn in. Any information that is zero on the data input & sag sheets will not show up on the sag report. This example is not showing a third sagger for this reason.

Example SAG REPORT: This example is smaller than the actual sag report that you will print.

<u>GEORGIA POWER COMPANY</u>		<u>McGRAW FORD TO CRESTVIEW 500 KV LINE</u>		<u>CONTRACTOR: WILSON CONSTRUCTION</u>							
<u>RULING SPAN LENGTH:</u>	<u>1387.60</u>	<u>SAG CHART #:</u>	<u>1 OF 27</u>	<u>JOB # OR P.O.</u>	<u>P7891</u>						
<u>CONDUCTOR SAG REPORT</u>											
<u>DATE:</u>	<u>SAG SECTION</u>	<u>SAGGER</u>	<u>SPAN SAGGED</u>	<u>SPAN LENGTH</u>	<u>TEMPERATURE</u>	<u>SAG IN FEET</u>	<u>TARGET</u>	<u>TARGET FOOTAGE</u>	<u>INSTRUMENT</u>	<u>INSTRUMENT</u>	<u>WEATHER</u>
							<u>STRUCTURE</u>	<u>BELOW SUPPORT</u>	<u>STRUCTURE</u>	<u>DISTANCE</u>	
7/11/2007	2 TO 8	NORMAN JAY JOHN KENNETH MITCHAM	3-4 5-6	1333.80 1442.10	86 86	46.96 54.91	4 6	44.01 60.05	3 5	50.00 50.00	SUNNY/CALM SUNNY/CALM
<u>SHIELD WIRE SAG REPORT</u>											
<u>DATE:</u>	<u>SAG SECTION</u>	<u>SAGGER</u>	<u>SPAN SAGGED</u>	<u>SPAN LENGTH</u>	<u>TEMPERATURE</u>	<u>SAG IN FEET</u>	<u>TARGET</u>	<u>TARGET FOOTAGE</u>	<u>INSTRUMENT</u>	<u>INSTRUMENT</u>	<u>WEATHER</u>
							<u>STRUCTURE</u>	<u>BELOW SUPPORT</u>	<u>STRUCTURE</u>	<u>DISTANCE</u>	
7/11/2007	2 TO 8	NORMAN JAY JOHN KENNETH MITCHAM	3-4 5-6	1333.80 1442.10	86 86	37.17 43.46	4 6	39.41 52.84	3 5	35.00 35.00	SUNNY/CALM SUNNY/CALM

FOREMAN: _____

REPRESENTATIVE: _____

Directions for a complete Project Sag Report workbook

1. All you have to do is make a new Microsoft excel workbook file and name it after the project, job number or P.O. number or anything you would like. Next copy and paste a copy of the Sag Report sheet from this program each time you finish a sag set up in this program to this new excel file. Please do not use copies of this file to send data. This will violate your user agreement with Peanut Calculations.

Please remember we are here to support you, and keep checking our web site for updates and new programs. Check www.peanutcalculations.com and any questions or problems you have will be answered.