

QT's "Pretty Good Guide" to Automated and Remote Scoring

Facilities and procedures that I use with Winscore to make scoring easier and faster.

Bound Leather, Signed First Editions Available at Ralph's Pretty Good Groceries Nationwide

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Note: This is not intended to be a tutorial on Gmail, Google Drive, Scripts, TinyURL, Winscore etc. That is way beyond the scope of this effort. So it falls to you to learn how to use the underlying tools proficiently.

The Big Picture

This document identifies the things helpful to nearly fully automate the scoring process. There are three main objectives in setting up "lights out" scoring, whether I am doing the scoring onsite or remotely:

1. Tracking
During the task, I want "spectators" to be able to follow the task using the SSA Sailplane Tracker
2. Preliminary scores available very quickly
Once a competitor has submitted a log, I want the preliminary score to appear on the SSA website virtually instantly. Within five minutes is quite achievable.
3. Access to logs as soon as a flight is scored
Increasingly, competitors and spectators are keenly interested in seeing the logs of scored pilots as soon as the score appears. This is also easy to accomplish by using Google Drive.

Initial Setup

There are a number of tasks to accomplish before the contest begins

1. Turnpoint Information Profiled in the SSA Contest information

In order for the Sailplane Tracker to work, the Contest Information on the SSA website must contain a valid link to the turnpoint database on the Worldwide Soaring Turnpoint Exchange (WSTE). Note the correct url format below. This is done through the contest administration website by the contest manager.

The image shows two side-by-side screenshots from the Soaring Society of America (SSA) website. The left screenshot displays the public contest information page for the "18-Meter National Championships". The right screenshot shows the "Add/Edit Contest" management form, where the "Contest Control Point URL" field is highlighted with a red box.

SSA SOARING SOCIETY OF AMERICA

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18-Meter National Championships

Contest Information

Contest Name: 18-Meter National Championships
Contest Location: Groveland, FL
Description:
Dates: Practice: 4/29/2018 - 4/30/2018
Contest: 5/1/2018 - 5/10/2018
Classes: 18 Meter
Fees: Deposit: 150.00
Entry: \$685.00
Checks to: Seminole-Lake Gliderport
Host Organization: Seminole-Lake Gliderport
Contest Web Site:
Control Point Site: <http://soaringweb.org/TP/Seminole>

Add/Edit Contest [Click here for more help.](#)

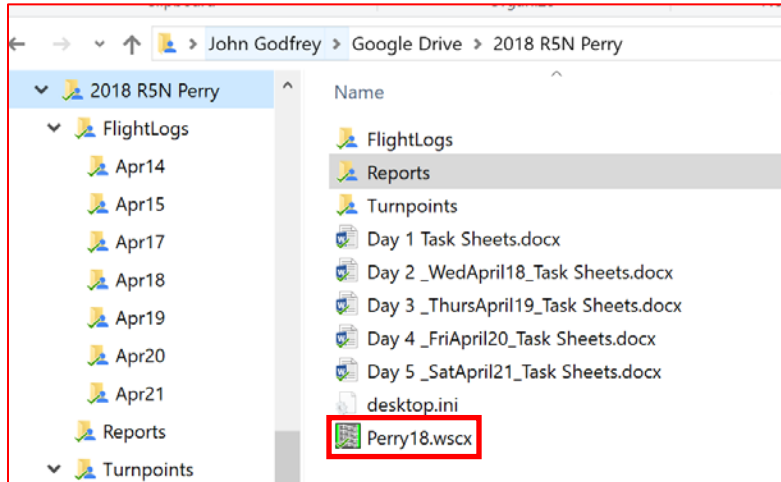
Contest Name 18-Meter National Championships
Location (City, St) Groveland, FL (Seminole Lake Gliderport)
First Practice Date 4/29/2018 **Last Practice Date** 4/30/2018 **First Contest Date** 5/1/2018 **Last Contest Date** 5/10/2018
Contest Manager Name Richard Owen **Contest Manager Email** stillflyn@aol.com
Contest Manager Phone 407-325-6500 **Contest Manager Fax**
Contest Host Organization Seminole-Lake Gliderport **Legal Name of Contest Organization** Seminole Flying and Soaring
Contest Mailing Address Richard Owen
4024 Soaring Lane
Clermont, FL 34714
Contest Web Site
Contest Control Point URL <http://soaringweb.org/TP/Seminole>

The pane on the left shows the web page for the contest on the SSA website and how to set the field using the contest management web page.

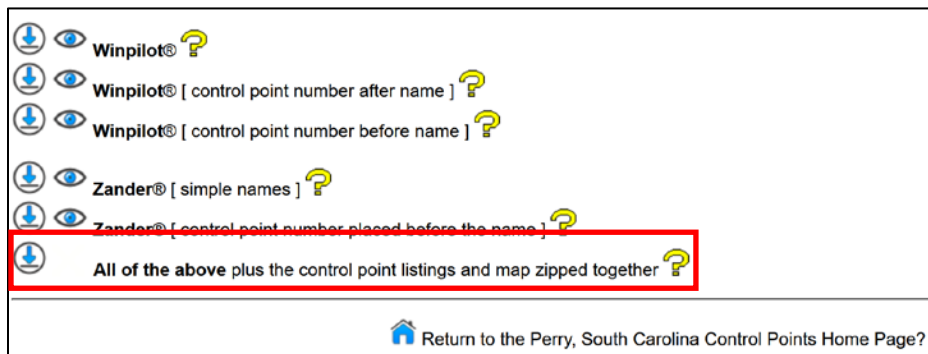
2. Store All the Contest Files on Google Drive

I use Google Drive to store all the contest files (iCloud or OneDrive probably works also, but I haven't used it). You need to install the Google "Backup and Sync" app on your computer and set it to automatically sync the contest directory to/from your computer (watch out, by default it will try to sync all your files, so pay attention to the settings). You will not use the web browser interface to Google Drive, just the mirrored folder stored on your computer.

a. Directory Structure

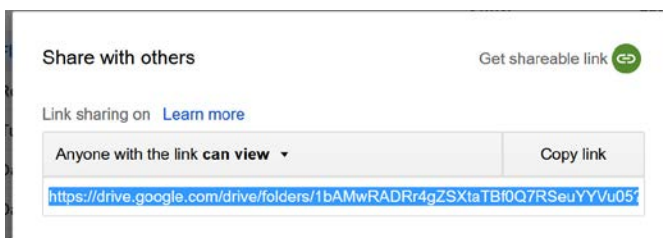


I always create the "FlightLogs" folder and "Turnpoints" folder (others as needed). Note that the Winscore .wscx data file is put in the top directory. I download and unzip all the various turnpoint file formats from the WSTE ("All the above..."). This downloads the local airspace files also.



b. Create shared TinyURL to enable read access to the FlightLogs directory

This is the mechanism folks will use to immediately access the flight logs. Set this up by getting the shared url of the FlightLogs directory using the web Google Drive. Then use TinyURL to create a short url. I put the short url on the task sheet for pilot reference.



<https://drive.google.com/drive/folders/1bAMwRADRr4gZSxtaTBf0Q7RSeuYYVu05?usp=sharing>

Welcome to TinyURL!™

Are you sick of posting URLs in emails only to have it break when sent causing the recipient to have to cut and paste it back together? Then you've come to the right place. By entering in a URL in the text field below, we will create a tiny URL that **will not break in email postings** and **never expires**.

Enter a long URL to make tiny:

Custom alias (optional):

May contain letters, numbers, and dashes.

3. Set up your Gmail account(s) to receive log files and messages

In addition to all the normal stuff about Names, Reply to, etc that you set up for any email. **Be sure to enable IMAP also.**

I use two gmail accounts. One is the account pilots send their log to along with questions and other communication (e.g. ssa.scoring@gmail.com). Make sure you remember to monitor the email during the scoring process. I detect and forward the messages with logs attached to them to a second gmail account (e.g. ssa.scoring.igc@gmail.com). This lets the logs accumulate in one place and the correspondence in the second. I find this easier to manage as it keeps the logs separate from the other correspondence.

Be sure to tell pilots to put the claimed tunpoint list for MATs in the body of the email with the log!

I also use filter scripts and the "Canned Response" Google Labs addin (see Settings) to send one of two autoresponses (1. Log received and 2. Message (but no log) received) and to forward the logs to the [ssa.scoring.igc](mailto:ssa.scoring.igc@gmail.com) email address. The label attached changes by contest.

The following filters are applied to all incoming mail:	
<input type="checkbox"/>	Matches: filename:*.igc has:attachment Do this: Skip Inbox, Star it, Apply label "2018 R5S Cordele", Forward to ssa.scoring.igc@gmail.com , Never send it to Spam, Send canned response "IGC File Received", Mark it as important
<input type="checkbox"/>	Matches: -{filename:*.igc OR filename:*.cai OR filename:*.zan OR filename:*.lxn} Do this: Star it, Apply label "2018 R5S Cordele", Send canned response "NO IGC LOG file received", Mark it as important

For the [ssa.scoring.igc](mailto:ssa.scoring.igc@gmail.com) email address I use this filter:

The following filters are applied to all incoming mail:	
<input type="checkbox"/>	Matches: has:attachment Do this: Apply label "2018 R5S Cordele", Never send it to Spam

4. Fix security setting of the email account Winscore will access

In Google Account (not mail) settings go to "Apps with Account Access" and turn on "Allow less secure apps." Otherwise Winscore will not succeed in accessing emailed logs.

5. Winscore Setup

This is not a Winscore tutorial. The notes below are about making the autoscoring process work as smoothly as possible and assume you are a proficient Winscore user. **Note that over the past couple of years many improvements have been made to Winscore and you are WELL ADVISED to review the release notes on the Winscore website.**

Once you have created the contest and imported the contest info and contestants, save the Winscore file to the Google drive folder (which is the parent of the "FlightLogs" and "Turnpoints" folders).

It is time well spent early to verify that folks are in the correct class and have the correct glider / motorglider in the pilot data. Also use the Handicap Report.

a. Import the Best Turnpoint Data File

Winscore uses the Cambridge .dat turnpoint file format. In the WSTE data, you will usually find three .dat files of the form below (ignore TURNPTS.dat and LNDGSITE.dat):

- perry18d.dat <USE THIS ONE, without the "nm">
- nm_pry8d.dat
- pry8d_nm.dat

The other two formats redundantly include the turnpoint # in the name pre or appended for convenience of some flight computers/pilots. Winscore doesn't need them.

b. Fix the Non-turnpoint Entries so Airport Bonuses are Awarded Correctly

One nuance of the WSTE data is that landable locations are coded as either "A" for airport or "L" for landable point. When the conversion is done to .dat format the "L"s do not get changed to "A" (Cambridge did not differentiate between airport and landable location).

If you look at the imported control points list in Winscore you will see something like:

39	Thompstontown	40	33.867 N	77	14.233 W	T	444
40	The Wall	40	06.317 N	78	24.033 W	T	2431
41	Start A	40	40.750 N	77	37.467 W	S	819
42	Start B	40	45.500 N	77	34.500 W	S	819
43	Start C	40	38.500 N	77	31.500 W	S	819
44	Start D	40	36.500 N	77	40.000 W	S	819
45	Start E	40	42.500 N	77	44.000 W	S	819
51	FINISH	40	40.750 N	77	37.467 W	H F A	819
100	McCardle	40	38.683 N	77	33.383 W	A	600
101	Dwight Yoder	40	38.217 N	77	43.217 W		935
102	Shangri La	40	41.133 N	77	28.467 W		751
103	Krout	40	38.217 N	77	29.017 W		581
104	Wagner	40	33.133 N	77	36.683 W	A	520
105	Centre Apk	40	48.700 N	77	39.433 W	A	1307
106	Pennfield	40	51.067 N	77	36.783 W	A	1200
107	Hostetler	40	37.867 N	77	50.983 W	A	760

The contest control points (Starts, Finishes and Turnpoints) end at #51. The only reason for everything after that is because it is a landable spot. For Winscore to award an airport bonus it must be coded "A" in Winscore. The exceptions would be airports that have been designated by the CD to not be eligible for a bonus.

You may also want to add special landpoints (if any) that are not airports, but the CD has declared that they are eligible for a bonus.

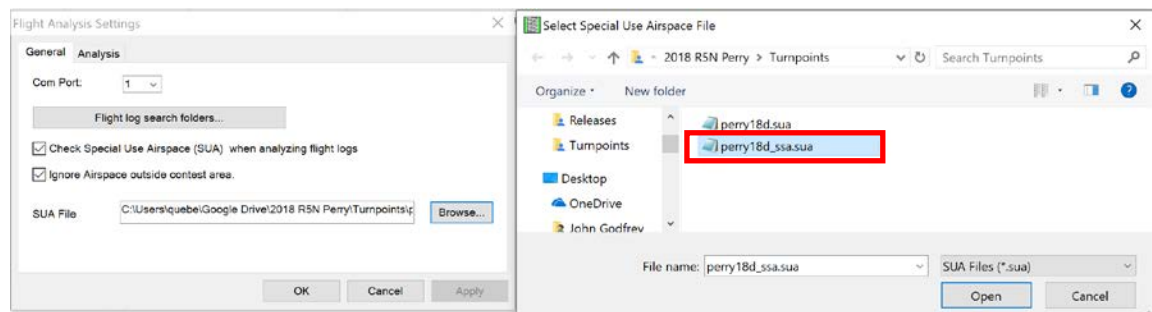
This all helps the "automaticness" and "lights-outness" of the process.

c. Set up the Best Airspace File to Check Against

Historically and still as of this writing Winscore will issue an airspace incursion warning without regard to the type of airspace or the altitude. Using the Winscore default airspace file (conus.sua) will tend to produce lots of airspace warnings that you have to manually review and ignore since it contains all the Class Ds, MOAs etc. etc.

The WSTE produces an airspace file that contains only the actually forbidden airspace that is relevant for scoring (Classes B, C, P, and R).

In Winscore, go to "Flight Logs > Settings"

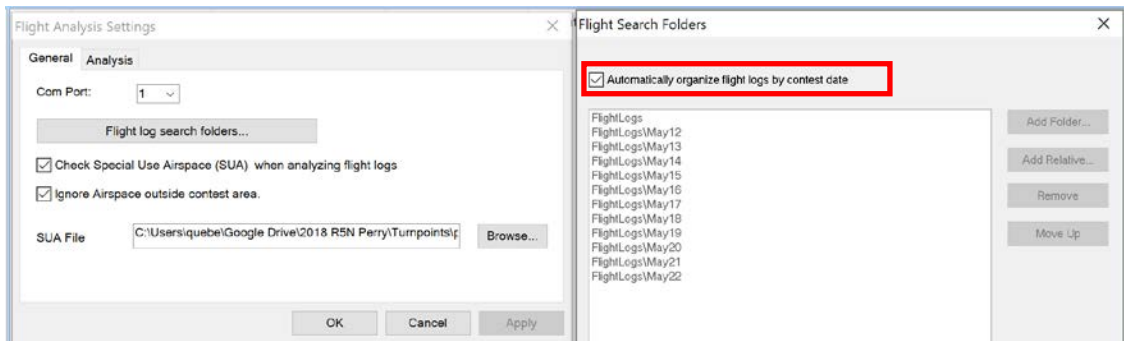


Navigate to your Google Drive "Turnpoints" folder and select the .sua file that has "_ssa" in the name. This file contains only the Class B, C, P, and R airspace.

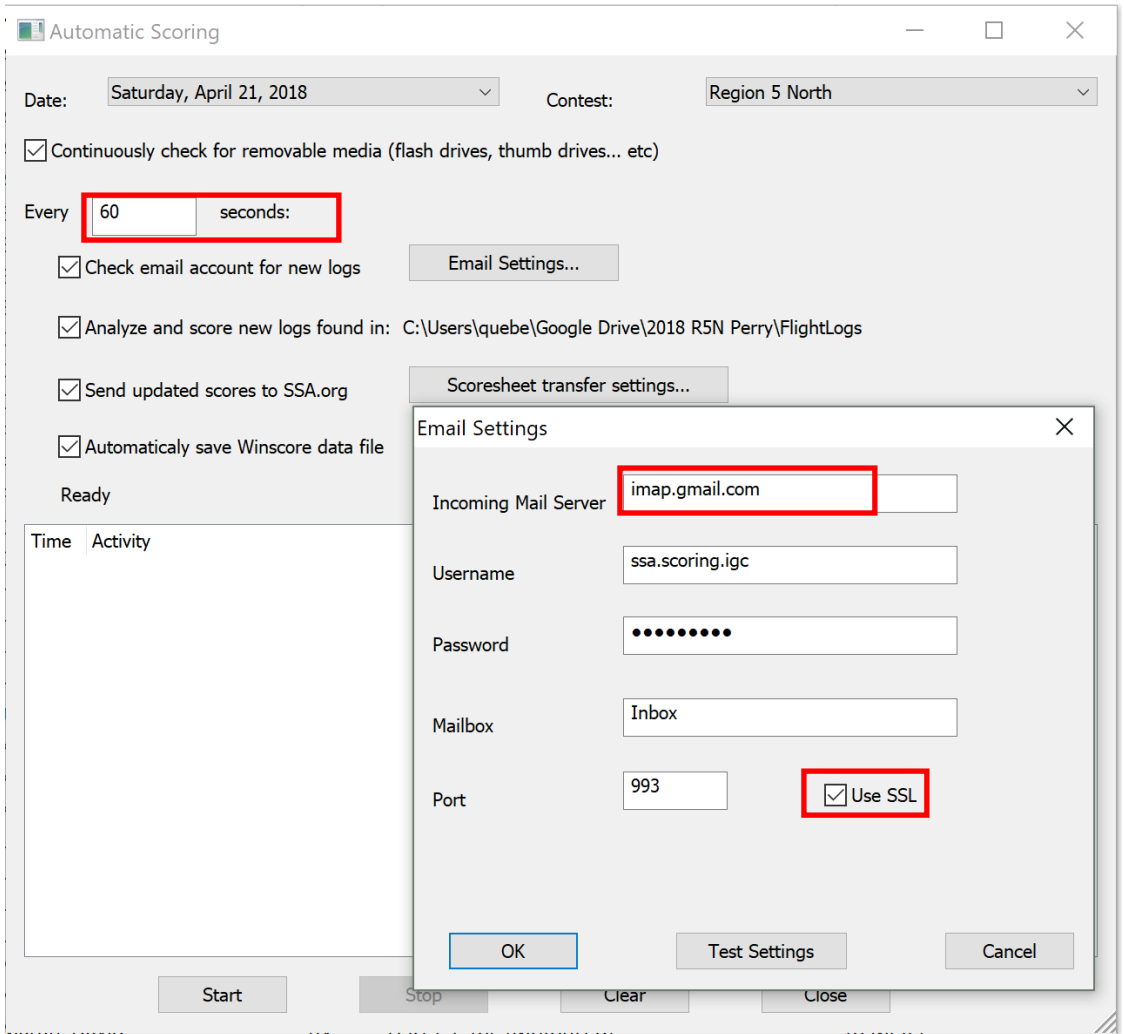
Note, you may occasionally have a TFR pop up in your area. Lynn Alley's website provides a way to download updated airspace. Go to <http://www.soaringdata.info/tfrs/tfrs.php>. Download just the TFR data in TNP format and use Notepad or some such to append it to your sua file.

d. Set up the Flight Log Search Folders

This is important. Check "Automatically organize...". This does two things. First, Winscore will automatically create subdirectories and put files for each day in their own folder automatically. Second, it finds the files through the "relative path" mechanism (relative to the location of the Winscore file). This allows the whole contest environment to be moved/accessed/opened on another computer and just work.



e. Set up Autoscore



A few notes. Set the interval to sixty seconds. Sending scoresheets to the SSA server more often makes the SSA server complain and Autoscore quits. Remember to enable IMAP on the mail server (Google) and "less secure application access". Check all boxes (except if you are remote scoring no need to check the top one - removable media).

6. Daily Cycle

- a. Get the task entered as early as possible and upload a scoresheet manually (from within Winscore)

Of course, all the scores are zero, but it puts a blank scoresheet on the SSA website. This is what tells the sailplane tracker what the task is. It also allows someone to double check the task definition by looking at the SSA website.

- b. Update the task and opening time as soon as available

As we all know, the task can change at the very last minute. Sometime in the heat of the moment the CD forgets to tell you the changes and/or forgets the opening times.

- c. Start Autoscore and collect logs as pilots bring in media

If you have lined up the duckies, you can now sit back and enjoy your adult beverage(s) as the logs come in (and/or you insert the media and wait for the acknowledgment status window), are scored and the scoresheet gets uploaded to the SSA site every few minutes.

You can also (as time permits) resolve issues with autoscore running (but beware of getting stuck on one log to the detriment of other logs not getting collected). During the busy time, just collect the logs and shoo away pilots who want to examine their trace over your shoulder. This gets the most logs processed the most quickly and posts the most preliminary scores most quickly.

To the extent that you work on warnings, be sure to clear the warning once resolved (e.g. penalty applied or motor run verified etc.) so you know what you have remaining to do.

- d. When most logs are in, upload the logs to the SSA website using the "Daily>Send to SSA Website" menu

Later, when ALL logs are in, and you have reviewed the scores carefully and made them unofficial, use the contest admin site to delete the first logs file and redo the upload using Winscore. This also uploads the Winscore file, making a good backup.

The image shows two screenshots of the SSA website interface. The left screenshot displays a table of flight logs with a red box around the 'Flight Logs' title for the 4/21/2018 entry. The right screenshot shows the 'Upload Flight Logs' form with a red box around the 'Delete' button.

Contest Flight Logs		Upload Flight Logs
Flight Date	Title	
4/21/2018	Flight Logs	
4/20/2018	Flight Logs	
4/19/2018	Flight Logs	
4/14/2018	Flight Logs	

Upload Flight Logs

Title

Contest Date (The date that these flight logs are for, 4/21/2018)

Sort Order (Entries are ordered first by date, then by 0)

Update Logs Online Delete

Challenges and Hints

Aside from all the typical challenges of scoring well, there are some that are particular to remote operations:

1. Be sure to put info on the task sheet next to the retrieve info:
 - a. email address to send log to,
 - b. TinyURL to access logs. (see sample task sheet attached)
2. The SSA score page automatically refreshes every two minutes so updated scores are always displayed. The full cycle from log emailed to score posted is normally about five minutes.
3. Arrange a reliable phone connection to the CD or deputy so you can resolve time critical things reliably and quickly
4. No log attached to email
5. Pilot doesn't put MAT turnpoints in body of email.
6. Wrong log attached to email (If I was really clever I would figure out how to get the Google email filter to tell if the log is for the correct day automatically).
7. Pilot uses wrong email address (see 7)
8. Pilot doesn't check for autoresponse so they don't notice their email never got sent or their log wasn't attached.
9. Emails from the Scorer go to pilot's junk mail or spam folder
10. Scorer forgets to monitor the email address messages are being sent to.
11. CD forgets to give you final task info and opening time (see Tom Pressley's form attached)

It's not perfect and occasionally burps, but with a little care and monitoring you can stay primarily concerned with a key scorers' metric – the beer(wine)/log ratio.

QT

2018 18-Meter National Championship

Tuesday May 8, 2018

Location: 6FLO: 120' MSL Lat: 28° 24.350' N Long: 081° 50.271' W

Email Logs and questions to: ssa.scoring@gmail.com
 Logs can be accessed immediately at <https://fluvur.com/18MNet18>

Retrieve: Primary (352) 394-5450 Secondary (518) 260-4846 (texts also)

2018 INTERNATIONAL S. OAV S. CHALLENGE

SYNOPTICS
 West frontal boundary will drift South during the day after heavy impact

PRECIPITARY 1 AM H

We have a very good chance in place with a 7 - 8 MI W squall along III over night 3 - 5 MI

CI OUIHS

8:30	1952.4	1952.4	1952.4	1952.4	1952.4	1952.4	1952.4
7:30							
7:30							
6:30							
5:30							
5:30							
4:30							
4:30							
3:30							
2:30							

Still some CU threat unless then yesterday

WIND

	2:00 PM	3:00 PM
SOUND	ML 10	ML 10
2:00 FT	0820T	0817
4:00 FT	0821T	0817
6:00 FT	0821T	0817
8:00 FT	0818	0812
10:00 FT		
18:00 FT	27070	24070
30:00 FT		

SITE VARIATIONS

Lower dewpoints and higher temperatures to the NW should drive bases about 1,000 ft higher
 CU remains in the order but less so than yesterday and more likely to the North

CV 20180508 167

Outlandings: Remember you are an uninvited guest of the property owner. Please be a good ambassador for soaring!!

Contest Sunset: 19:45 (7:45 PM) local

Contest Frequency (monitor once on grid): 136.67 MHz
 At 10 sm from finish switch to 123.3 MHz (no call on freq switch)

Safety Finish Reference Altitudes (for 900' MSL / 1sm Cylinder Finish):
 @5 mi 1700' MSL @10 mi 2700' MSL @15 mi 3700' MSL

Task A: Assigned Task

ID	Name	Distance (Miles)	Radius	Alt(MSL)
52	Start B	0.00	5.0	4000 Max
42	Williston	74.51		
24	Love Field	118.98		
10	Chinsegut	156.64		
25	MarionCounty	187.85		
20	Grey Stone	209.38		
31	Osborn	263.39		
11	Cub Haven	284.68		
27	MontgomerFILM	307.38		
6	Burntwood	343.89		
61	FINISH	353.56	1.0	900 Min
Total Distance:		353.56 Miles		

Task B: Assigned Task

ID	Name	Distance (Miles)	Radius	Alt(MSL)
52	Start B	0.00	5.0	4000 Max
42	Williston	74.51		
24	Love Field	118.98		
10	Chinsegut	156.64		
25	MarionCounty	187.85		
20	Grey Stone	209.38		
31	Osborn	263.39		
6	Burntwood	281.21		
61	FINISH	290.88	1.0	900 Min
Total Distance:		290.88 Miles		

Remote Scoring Task Information Sheet

Please fill out, photograph and send to scorer as soon as task is open.

Task Type: Assigned Speed Task (AT)

Modified Assigned Task (MAT)

Turn Area Task (TAT)

Date: _____

Class: _____

Minimum Task Time: _____

Minimum Task Distance: _____

Task Opening Time: _____

Please write legibly!

Control Point Number	Control Point Name	Radius (miles)
1	Start	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	Finish	

Maximum Start Height (msl) _____

Minimum Finish Height (msl) _____

Radius for turnpoints not needed for AT and MAT

Check List

Information Sheet sent to scorekeeper

Opening Time sent to scorekeeper