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THE UPS AND DOWNS

OF THE

KANSAS SOARING ASSOCIATION

Editor: Tony Condon

Volume LIV **December 2014** **Number 12**

Notes from the President

At this time of year, it is nice to look back and think of all we have accomplished. You, the members of KSA, have had a wonderful 2014. We hosted a regional contest, provided glider rides at Hutchinson and Newton, welcomed seven new members, provided over 400 tows, while maintaining a safe operation. Well done.

January, we will have an opportunity to celebrate individual accomplishments: state records, FAI badges, cross country flights, and individual contributions to the club. Please plan to join my family at the awards banquet. Sign up and pay in advance at the December meeting.

This is my last column as president. **Tony Condon** will be taking office in January, and I look forward to working with him and the board as he takes the lead for KSA.

Over the last four years, I am proud of what we have done together, including: ten dedicated work days, sealed 360,000 sq ft of runway, painted runway markings, added a second tow plane, hosted two regional contests, moved to a January KSA membership renewal, survived a small increase in dues, hosted monthy cookouts at Sunflower, held informative and entertaining meetings, changed meeting location and time (6:30 at Cabela's), added regularly scheduled flight instructors to the duty roster. This is just a short list of some of the highlights, but it shows you what we can do when we work together. Thank you to everyone that has been a part of this success. Enjoy this time of reflection, and celebrate with your family and friends.

Happy landings,
Andrew

KSA CALENDAR

December 13th - KSA Meeting - Cabela's - Steve Leonard - Flying at New Airports

2015

January 10th - KSA Awards Banquet - Kansas Aviation Museum

February 7th - KSA Meeting - Brian Bird - Working at NASA - Cabela's

February 28th - SSA Board Meeting and Annual Membership Meeting - Greenville, SC

March 14th - KSA Meeting - Cabela's - Nate Mathews, Falconry

April 3rd - 17th - 1st Pan American Gliding Championships - Benton, TN

April 11th - KSA Meeting - Cabela's - Rafael Soldan, Safety Meeting

June 24th - July 3rd - Sports Class Nationals - Waynesville, OH

June 24th - July 3rd - 18 Meter, Open, and Club Class Nationals - Hobbs, NM

July 4th - Kansas Kowbell Klassic

July 2nd - July 9th - 1-26 Championships - Minden, NV

August 1st - 15th - 1st 13.5 Meter World Championships - Pociunai, Kaunas, Lithuania

September 28th-30th - 2015 Fly Kansas Air Tour

Member Accomplishments

David Kennedy passed his Private Pilot - Glider Knowledge Test. Now on to the Checkride!

Michael Groszek completed his first solo in an Airplane

Sunflower Seeds

November 25th: **David Kennedy** flew the 2-33 with **Tony Condon** to prep for his Private Checkride. **Mike Logback** towed.

KSA Towplane News

Effective January 1st 2015

Cross Country rate $100/hr

2000' tow $22

In consideration of Valentine's Day, the February 2015 meeting has been moved up to February 7th!

Talihina Seeds

November 11th: **Tony Condon** took Kate the Cirrus to Talihina for a day of ridge soaring on the Kiamichi, following the strong cold front. The ridge worked well and there were a few thermals. Some wave was in the valley but contacting it proved difficult. Clouds early were overcast but broke up as the day went on which was appreciated since the high for the day was 48 F! Also attending were Omri Kalinsky, Andre DeBaghy, Tim McAllister, and Gerry Keifer, all members of Texas Soaring Association. Mike Westbrook towed with Big Q Aviation's L-19 Bird Dog.

Reprited from the September 1974 *Variometer*

FLIGHT REPORT AND ANALYSIS

"DIAMOND DISTANCE TRIANGLE in a WOODEN HOMEBUILT IN KANSAS ! "
by Bob Leonard

The soaring weather in central Kansas had been excellent since 3 July'74. Good cu with bases from 8500 to 11,500 feet were the rule. I had flown a 100, 200, and a 300 km triangle between 3 July and 20 July. On July 20th the winds aloft were forecast to be from 5 to 15 knots from the south decreasing with altitude. A flat triangle starting at Sunflower A erodrome (the old Hutchinson Kansas ANG base) with the first turn point 84 miles North; Lincoln, Kansas Airport then South 159.5 miles to Cherokee, Okla. for the second turn point was chosen, the return leg would be 79.5 miles, Total distance of about 323.5 miles. With cu forming about 12:30 CDST each day I decided that launch should be no later than 12:00. This would require an average ground speed of 50mph for 6½ hours to complete the task, no little task for a ship like the Annebula.

Takeoff was at 12:06 with release at 3500feet MSL over the airport in good lift. I drove West about ½ mile to get out of the lift to notch the barograph. Cu were widely scattered on the first leg. Blue thermals were used for the first 30 miles. Initially the lift seemed to break up at about 7500 f eet MSL. By 1300 the lift improved to 400 to 700FPM with good cu and 9500 feet being reached easily with the bases still another 1000 feet higher, Lincoln Airport was reached a t 13:41 essentially on schedule. Ground speed from take-off was 55mph to this point.

I passed about 15 miles west of Sunflower on the second leg at 15:22 (about 20 minutes behind schedual). At this point I had just topped out at 11,000feet with climbs timing over 500 fpm. During the second leg several long glides with very little sink were made. Cruise speeds following the speed ring were 65 to 70 knots with an occassional 75 knots.

The last 40 miles of the second leg has some wide black bottom cu with bases over 11,000 feet. Some of these provided no lift but good lift was found over the turn point of Cherokee which was photographed at 17:07 (5:01 after take-off and only 11 minutes behind schedual). The speed on the second leg turned out to be 46.5mph.

After rounding the turn point several large cu yielded no lift then a slow climb to 11,000 feet made the 20 mile glide accross a hole to a blue thermal West of Harper, Kansas.

The last thermal circled in was over Rago which made Sunflower and Diamond distance a sure thing from 9600 feet.

Sunflower was reached at 18:28 (6:28pm) with 4000 feet altitude, for no real reason I took two pictures of Sunflower then went over to a thermal being used by 4 other sailplanes and climbed out to 8000 feet before I asked myself"why are you climbing when there is a Diamond waiting for you on the ground"?

I rolled to a stop on the ramp at Sunflower Aerodrome about 6:45 hours after take-off.

After the flight an analysis of the flight was made from the barogram before sending it into SSA. Only prolonged climbs were measured in an attempt to show climbs during circling flight.

First leg:	13,124 feet gained in seven thermals averaging323 fpm. (44.7 % of the 90.8 minutes was spent climbing)
2nd leg:	30,580 feet gained in 15 thermals averaging 414 fpm. (32.5 % of 226.3 minutes was spent circling).
3rd leg:	7,181 feet gained in five thermals averaging 257 fpm. (46.4 % of the 60.3 minutes was spent circling).

The highest Avg. Rate of Climb was 728 ft/min for a gain of 1980 feet.

The longest time spent circling was 10.7 min. to gain 3,219 feet.

The most Altitude Gained in one thermal was 4,086 feet at 448 ft/min.

The longest Glide duration was 31.3 min for a loss of 3,714 feet (-118.5 ft/min.)

The greatest amount of Altitude loss in one glide was 4,330 feet in 15.3 minutes

The highest Altitude was 11,360 feet.

A total of 27 thermals were worked for a gain of 50,847 feet in 142.27 minutes giving an average rate of climb of 357 ft/min. 37 % of the time was spent circling.

The average glide ratio was 33.59 (Cloud streets sure make a wooden homebuilt look good).

The Altitude loss from departure to arrival was 48,744 feet with an average sink rate of 207.33 ft/min.

Average ground speed when not circling was 93.6mph.

BAROGRAM ANALYSIS FOR WHAT ITS WORTH

Elapsed time	△ minutes	Alt.	change Alt.	rate of climb	Remarks
0	0	1580			
4.33	4.33	3932	2352	+533	Release & short climb
4.92	.49	3560	-372	-630	Notch-Start 1st climb
13.64	8.72	7646	+4086	+468	1st thermal
23.36	9.72	5417	-2229	-229	#1 Glide
32.28	8.92	7770	+2353	+263	2nd thermal
39.42	7.14	6408	-1362	-190	#2 Glide
45.36	5.94	8265	+1857	+312	3rd thermal
49.52	4.16	7398	-867	-208	#3 Glide
56.26	6.74	8884	+1486	+220	4th thermal
60.22	3.96	7770	-1114	-281	#4 Glide
64.39	4.17	8512	+742	+177.9	5th thermal
75.88	11.49	7522	-990	-86.19	#5 Glide
78.60	2.72	9503	+1981	+728	6th thermal
88.37	9.77	7646	-1857	-190	#6 Glide
91.74	3.37	8265	+619	+183	7th thermal
95.7	----	7274	----	----	Lincoln, Kansas
97.09	5.35	6903	-1362	-254	#7 Glide
105.61	8.52	9131	+2228	+261	8th thermal
106.8	1.19	8512	-619	-520	#8 Glide

109.38	2.58	9380	+867	+336	9th thermal
112.74	3.36	8389	-991	-294.9	#9 Glide
115.92	3.18	9255	+866	+272	10th thermal
125.04	9.12	6160	-3095	-339	#10 Glide
132.37	7.33	9131	+2971	+405	11 Climb
147.62	15.25	4798	-4333	-284	#11 Glide
157.74	9.12	8884	+4086	+448	12 Climb
160.90	3.16	8636	-248	-78.48	#12 Glide
164.67	3.77	10122	+1486	+394	13th Climb
184.69	20.02	7893	-2229	-111.34	#13 Glide
190.09	5.35	10493	+2600	+486	14th Climb
200.74	10.7	8017	-2422	-226	#14 Glide
203.71	2.97	9379	+1362	+458	15th Climb
206.49	2.78	8760	-619	-222	#15 Glide
211.84	5.35	11236	+2476	+462.8	16th Climb
221.75	9.91	8636	-2600	-262	#16 Glide
224.13	2.38	9379	+743	+312	17th Climb
227.50	3.37	8636	-743	-220	#17 Glide
231.26	3.76	10369	+1733	+460	18th Climb
237.01	5.75	9255	-114	-193.7	#18 Glide
239.59	2.58	9998	+743	+288	19th Climb
249.7	10.11	9131	-867	-85.7	#19 Glide
253.27	3.57	11360	+2229	+624	20th Climb
284.58	31.33	7646	-3714	-118.5	#20 Glide
291.12	6.54	11112	+3466	+530	21st Climb
304.00	12.88	8017	-3095	-240	#21 Glide
310.74	6.74	10741	+2724	+404	22nd Climb
313.91	3.17	9131	-1610	-507	#22 Glide
322.03	8.12	11360	+2229	+274	23rd Climb---Cherokee, Okla.
324.81	2.78	10360	-991	-356	#23 Glide
328.18	3.37	11360	+991	+294	24th Climb
340.67	12.49	7274	-4086	-327	#24 Glide
351.38	10.71	10493	+3219	+300	25th Climb
358.71	7.33	9255	-1184	-161.5	#25 Glide
361.48	2.77	9750	+495	+178	26th Climb
366.03	4.55	8884	-866	-190.3	#26 Glide
369.01	2.98	9131	+247	+82	27th Climb
382.29	13.28	5665	-3466	-261	Final Glide to Sunflower
385.46	3.17	4303	-1362	-429	Start Climb
398.15	12.69	7893	+3590	+283	Climb--
404.49	6.34	1580	-6319	-996	Final to land

From start at 3560
to Finish at 5665
Alt. Gain of 50,849 in 142.27
minutes or 357 fpm avg.
37% of Time Circling
Avg. Glide Ratio = 33.59
207.33 minutes cruising
Alt. Loss 48.744 or 235.1 fpm.

Editor's Note - Looking at **Bob**'s flight analysis from 1974 sure makes me appreciate SeeYou and the OLC!

KSA Award Applications and Nominations must be submitted by December 15th! Form at the end of this issue. Send to Tony Condon at abcondon@gmail.com

Get your Banquet Tickets at the December Meeting!
Only $20/person.

Five Hour Duration

By **Matt Gonitzke**

According to the weather forecast, Sunday the 28th appeared to be the best day of all for the VSA regatta. Most of the out-of-town folks had left, but us locals and the others left flew. The weather looked better to the east, which is odd for this location, so I decided to launch early and fly Wichita Gliderport-El Dorado-Augusta-Wichita Gliderport twice, and try to get the hardest part of the silver badge, the 5-hour duration flight, in the process. In order to maximize my available soaring time, I launched at noon and released from the towplane at 12:05. Staying up was initially quite a struggle. It was quite early in the day, the cu had only just begun to form, and lift was weak. I stuck well enough that several other gliders launched, and this made finding the thermals easier. By 1pm or so the cu had filled in as far as the eye could see, so I headed for El Dorado.

The sky was a glider pilot's dream. Heading towards El Dorado.

I stayed high for this flight; I'm not sure that I was ever below 5500' MSL until the end. I had several great climbs on the way to El Dorado, and then a nearly 500 fpm elevator to around 7500'. I then had a cloud street to my next turnpoint of Augusta, which allowed me to fly 52:1 at 43 mph between El Dorado and Augusta. It was probably the best day of soaring of my entire soaring career, and I had a blast. I will remember this flight for the rest of my life.

I had no trouble making it from Augusta back to the Wichita Gliderport, so I set out on the triangle once more. About 3/4 of the way to El Dorado, I abandoned the task because the clouds in the general area I needed to go didn't look very good. I stayed local and screwed around for the remainder of my flight, at one point reaching over 8100' MSL. It was rather cold up there, approximately 55 degrees. At this point, it was 4:30 pm and I had 5 hours in the bag. There was still lift and cu everywhere. I flew around a bit more and landed after 5.3 hours in the air.

Thanks to my new and improved seat cushion, I was even able to walk afterwards. Thus ends the tale of how I completed my silver badge at the VSA regatta. 13.4 hours total of flying over the three-day period, accounting for roughly 1/4 of my hours in 2014. As a side note, it is quite likely that more of the VSA silver coins were issued at this regatta than any previous one. It was an awesome weekend of soaring. This also ended up being my last soaring flight of 2014, so I certainly ended the season on a high note.

OLC Link to this flight

RULES FOR KSA FLYING AWARDS, 2014

Unless otherwise noted, the following applies to all awards:

Awards are to be made for flights with departure points in Kansas.

All distance and speed flights must start at an altitude of 1000 meters (3281 feet) or less AGL, except the Kowbell Klassic.

No altitude gate is required.

Handicaps, when they are used to evaluate competing pilot accomplishments while flying different sailplanes, will be the current handicaps used by SSA. For sailplanes without a SSA handicap, a handicap will be established by the KSA Board of Directors. For the 2014 season, the SSA 2014 Handicap list, as amended/added to below, will be used (the 2014 list is available on the SSA web page, www.ssa.org):

Schreder HP-18 - 1.02

When handicaps are used, an additional factor will be applied to any flight if the aircraft is carrying inflight disposable ballast (water) at takeoff. The additional factor will be multiplying the original handicap by .92

Turnpoints will be photographed

The camera does not need to be mounted. Handheld is OK.

No specific film type or processing is required.

Only photographs pertinent to the flight need be submitted. An uncut film strip is not required.

Contest style turnpoint photos can be used for any turnpoint in the KSA turnpoint book.

FAI style photos can be used for any turnpoint.

GPS ground tracks may be submitted in lieu of photographs for any task. The track must have the date and pertinent times displayed on it. It is preferred that the track be submitted in the IGC format. On declared tasks, the ground track must show that the flight path went around the outside of the turnpoint. On pilot selected tasks, the ground track must show that the glider passed within ¼ mile of the turnpoint, in the location for a proper turnpoint photo.

Speed tasks- Allowed methods for time recording:

Start/Finish gate (ground timed)

Data back photos of start/finish

Pilot timed task

Wooden Wings Award

Awarded for the longest flight in a wooden winged sailplane. The task may be free distance, or if turnpoints are to be used, they must be declared in advance of the flight and in the sequence to be used. The task declaration may be written or verbal. The turnpoints need not form a closed course. A remote finish point can be used.

If the course is abandoned before all turnpoints are made, the flight will be scored as the distance for the achieved turnpoints, plus the distance to the next declared turnpoint, minus the distance from the landing point to the next attempted turnpoint, but not less than the distance to the last achieved turnpoint.

Mamie Cup

Awarded for the greatest distance flown from a Kansas departure. The task may be free distance, or if turnpoint are to be used, they must be declared in advance of the flight and in the sequence to be used. The task declaration may be written or verbal. The turnpoints need not form a closed course. A remote finish point can be used.

If the course is abandoned before all turnpoints are made, the flight will be scored as the distance for the achieved turnpoints, plus the distance to the next declared turnpoint, minus the distance from the landing point to the next attempted turnpoint, but not less than the distance to the last achieved turnpoint.

KSA Flying Horse (Silver)

Awarded for the best speed achieved around a 100 KM pre-declared closed course with a maximum of two turnpoints.

KSA 200 KM

Awarded for the best speed achieved around a 200 KM pre-declared closed course with a maximum of two turnpoints.

KSA Flying Horse (Gold)

Awarded for the best speed achieved around a 300 KM pre-declared closed course with a maximum of two turnpoints.

KSA Handicap Score Trophy (Pilot of the Year)

Awarded for the best combined score in four tasks - Duration (not handicapped, but 6 hours max scored), Altitude Gain (not handicapped), Distance, and Speed. Distance and speed are handicapped per SSA Handicaps or the KSA amended/added handicap. Departure point for all flights must be in Kansas. Data must be taken from four flights (i.e., one flight per task).

The distance task may be free distance, or if turnpoint are to be used, they must be declared in advance of the flight and in the sequence to be used. The task declaration may be written or verbal. The turnpoints need not form a closed course. A remote finish point can be used.

If the course is abandoned before all turnpoints are made, the flight will be scored as the distance for the achieved turnpoints, plus the distance to the next declared turnpoint, minus the distance from the landing point to the next attempted turnpoint, but not less than the distance to the last achieved turnpoint.

The speed task must be a closed course of at least 100 KM. However, a predeclared 200 KM (minimum) non-closed course may be used if you are flying a sailplane with a handicap factor of 1.36 or greater (Examples: 2-22, 1-26, 2-33, Swallow, etc.) In this case, a wind correction factor of 15 MPH will be subtracted from the achieved speed prior to scoring.

A score of 1000 points will be awarded the best performance in each task. Each contestant's performance will be ratioed according to the best performance in the task being evaluated. The sum of each contestant's scores will be compared, the highest being the winner.

Cumulative Speed Trophy (Charles Henning Award)

The intent of this trophy is to encourage more people to fly cross country. All a person needs to compete is a sailplane, a databack camera or a recording GPS, a KSA turnpoint book, and a tow.

1) The cross country task will be a Pilot Selected Task, or PST with a minimum time of 2 Hours.

2) Speed will be determined by the time on course as indicated by the databack camera or recording GPS, or 2 Hours, whichever is greater.

3) Scoring for the trophy will use the SSA handicap or the KSA amended/added handicap.

4) There is no limit on start or finish altitude.

5) The task can consist of any turnpoints in the KSA turnpoint book. Contest style photographs will be used. Turnpoints can be flown in any order. However, if a turnpoint is used more than once, two other turnpoints must be photographed in between. If a GPS Flight log is used for documentation, the flight log must show the glider passed within ¼ mile of the turnpoint, in the location for a proper turnpoint photo.

6) The first picture for the task must include the date. Note: More than one task can be on the same roll of film. Only one task per flight.

7) The second picture for the task will be the start point. This picture determines the Start Time.

8) To finish a task, the pilot must take a picture of the finish point, or take a picture when the glider comes to a stop after landing. If a landing photo is used, the next photo on the film must show the glider and an easily recognizable landmark. No more than 30 minutes should elapse between the landing photo and the glider ID photo. Note: The Start Point and the Finish Point Must be the same point.

9) The winner will be determined by averaging the two best tasks of the year for each pilot. The averaging will be accomplished by adding the two speeds and dividing by 2.

Lead C

Awarded to the pilot or soaring supporter who makes the most noteworthy non-achievement during the calendar year.

Praying Mantis

Awarded to the pilot who makes the most significant advance in his or her soaring ability during the calendar year. To be eligible for this award, the pilot must not yet have his or her Silver Badge at the beginning of the calendar year.

Send your applications to **Tony Condon** at abcondon@gmail.com

2014 KSA AWARDS
INFORMATION SHEET

Pilot's Name_____ Date_____

AWARD	DATE OF FLIGHT	SAILPLANE	SPECIFICS
Praying Mantis (Nominate Someone)			
Towing Operations (Nominate Someone)			
Club Maintenance (Nominate Someone)			
Wooden Wings			Distance Flown
Flying Horse Silver (100 KM Speed Task)			Speed in MPH
Flying Horse Crystal (200 KM Speed Task)			Speed in MPH
Flying Horse Gold (300 KM Speed Task)			Speed in MPH
Charles Henning Memorial Award (two flights required)	Flight 1 Date Flight 2 Date	Flight 1 Sailplane Flight 2 Sailplane	Flight 1 Speed (and time) Flight 2 Speed (and time)
Kansas Kowbell Klassic	Landing Location		Distance
Kansas Kowbell Klassic Konsolation	Pre-declared Task (must have been completed to count!)		Distance
Mamie Cup			Distance
Pilot of the Year by Handicap Score	Altitude Duration Speed* Distance*		(feet) (hours:minutes) (MPH) (Statute miles)
Rex Hamilton Memorial Award			(Nominate Someone)
Other Significant Accomplishments (First Solo, First soaring flight, FAI Badge Leg, completion of an FAI Badge, 100th flight, 1000th tow, etc.			

Documentation required for all flights, per rules published in the *Variometer*.

*If you had disposable ballast on board at takeoff of the Speed or Distance flight for consideration, you must put a "B" next to your claimed speed or distance. This affects the handicap number used for evaluating you performance.

"I certify that all flight claims made above were launched in Kansas and are properly documented (does not apply to "Other Significant Accomplishments" category).

Signed_____

KSA VARIOMETER

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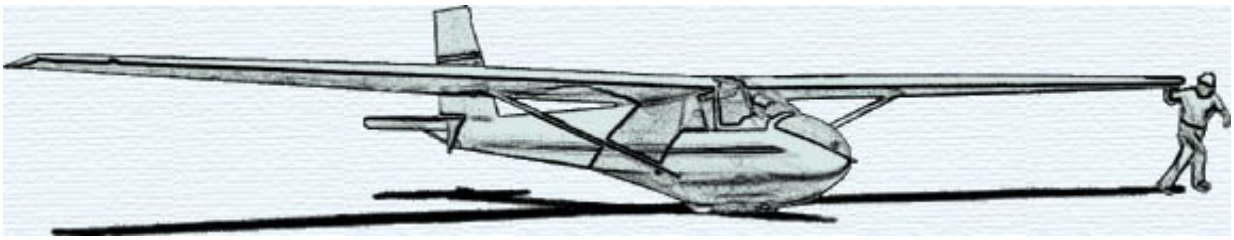

KSA MEETING

Saturday December 13th, 2014

Flying at New Sites - Steve Leonard

Cabela's

6:30 PM

SSA Calendars - $10

KSA Banquet Tickets - $20