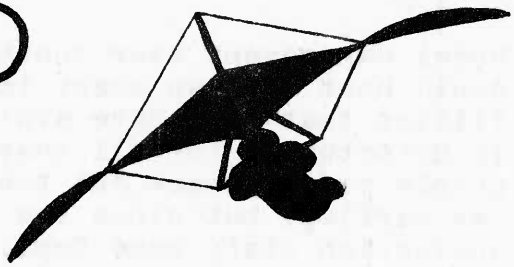
# UPDRAFT



NEWSLETTER of the WESTERN MASSACHUSETTS HANG GLIDER ASSOCIATION

VOLUME 2, NUMBER 3 MARCH 1976 Editor: Mick Morrissey



## MEETING NOTICE

The next WMHGA meeting will be at the ME Bar and Lounge on Route 47, north of Skinner State Park in Hadley (between Hadley center and So. Hadley.) The meeting will be at 7:30 PM on TUESDAY, April 6. All club officers are requested to be one half hour early for a board meeting. Monthly WMHGA meetings are always held at the ME Bar on the first Tuesday of every month, at 7:30 PM.

## March Meeting

The March meeting was the first to be held at the new meeting place, and was a mixed success. On the positive side, we had the largest turnout since last summer, including a number of flyers from the North Adams/Greylock area. Spencer Smith's films of soaring in Tennessee and at Sandia Crest in New Mexico were all we needed to get us looking forward to spring. On the negative side, it was necessary for WMHGA to share the lounge with the local snowmobile club, and the confusion made it very difficult to hold the meeting. This was the final meeting of the snowmobilers until next winter, so we don't anticipate any problems from this source again. Next winter, the snowmobile club will be meeting on a different Tuesday. Cancellation of the projected hang glider trade show and convention at the Hotel Northampton left us with little to accomplish at this meeting anyway.

## TRADE SHOW

The hang glider trade show and convention planned for the Hotel Northampton had to be cancelled on short notice; attempts were made to notify all interested parties during the week preceeding the convention. If we missed anyone, please accept our apologies. The convention had been planned and sponsored by the Hotel Northampton, and technical assistance and communications were being arranged with the assistance of the MGS shop in 'Hamp. All of the actual arrangements were in the hands of the hotel people, and all meetings and discussions had taken place at the MGS shop, rather than at the hotel. A week before the meeting, Sue McGuire and Sharon Chandler of MGS visited the hotel to assist in detail planning for the exhibits. Upon arrival, they found that the space allocated for the show was much smaller than what had been described by the hotel personnel, and that the display area was under a seven-foot ceiling! At this point, it was necessary for MGS to inform the hotel that it was physically impossible to conduct the event in the projected facilities, and all that could be done was to try and spread the word that the event was off. Since the hotel people had been to MGS several times, and seen the size of hang gliders when set up for display, and since detailed information was available to them regarding space requirements, MGS found it impossible to understand why the

hotel management ever thought they could host such an event in the facilities that they have available. It is unfortunate for all that the MGS people didn't check out the facilities earlier, but since the hotel's convention staff were familiar with the equipment and space requirements that the show would involve, it was assumed that they would not try to conduct the show unless their plans included adequate facilities.

## MEMBERSHIP RENEWAL TIME

All members and subscribers are reminded that membership expires in April, no matter when you joined the association. Dues are six dollars per year ($6.00), and may be paid at the April meeting. Alternately, you may send your dues directly to Treasurer John Dempsey at 107 Ridge Road, East Longmeadow, MA 01106. Anyone who has not renewed their membership by the April meeting will not be on the list of subscribers for the April issue of this newsletter. Also, non-members will not be able to purchase or renew their GSI insurance/ratings at the reduced club price, and may be unable to fly WMHGA-controlled sites. REMEMBER: ALL DUES ARE RENEWABLE IN APRIL, NO MATTER WHEN YOU FIRST JOINED WMHGA, AND MUST BE PAID AT OR BY THE APRIL MEETING. Please note that GSI membership is renewable one year from the time you originally bought GSI, so this need not necessarily be due at the same time as WMHGA dues.

## GSI PROCEEDURES

To ease confusion and provide efficient service to members, the following proceedure has been adopted for pilots to enter the GSI insurance/rating program.

1. Obtain a GSI application form from any club officer (or anywhere else you happen upon one.)

2. Assemble your completed GSI application, a check or money order for fifteem dollars ($15.00),and two passport-sized photographs, and your log book. Failure to provide any of these items will make it impossible to process your GSI materials.

3. Take ALL of this material to Flight Director Chuck LaVersa, to arrange for assignment of a rating. For pilots whose flying skills are familiar to Chuck, a log book and a discussion session will suffice for rating assignments; others will most likely need to arrange a supervised flight session. Ratings obtained through other associations Whose Ratings Are Honored By WMHGA/GSI will substitute for this session.

4. Once a rating is assigned, all the material will be sent in to GSI by Chuck, and the card and other membership material will be returned directly to the pilot by GSI.

N.B.: Since every GSI card must carry a photograph and a rating, it is absolutely necessary that all of the above steps be followed in order to join GSI. Pilots entering the GSI system as Class I flyers may dispense with rating assignments. The best way to catch Chuck to make arrangements for rating assignments is to attend the WMHGA's monthly meetings.

## UPDRAFT DEADLINES

### ADVERTIZING

All ads for Updraft MUST be in the hands of the editor by the time of the monthly WMHGA meeting preceeding publication of the issue in which the ad is to appear. All ads must be pre-paid. Cost is $6.00 for one-half page, and $12.00 for a full page. Ads will be spaced throughout the magazine, rather than being all at the end of the mag as in the past. Due to difficulty in collecting for ad billings, all ads must be prepaid. Ads and payment may be given to the editor at the monthly meeting or sent to me c/o MGS, 300 Pleasant St, Northampton, MA 01060. Payment must accompany each ad, and ads are to be photo-ready. Half-page ads are 7½ by 4 3/4 inches, and full page ads are 10 by 7½ inches. These sizes already account for a margin, so the sizes quoted are the size of the actual material printed. Oversize ads will be cut down with resultant loss of material. Ads submitted after the deadline will be

held for the next issue, or inserted at the back of the present issue, as space permits and at the discretion of the editor. Please specify which issue an ad should appear in at the time of submission.

NEWS, ARTICLES, STORIES

Deadline for non-advertizing material will be the 10th of every month; however, material of great importance, timliness, or high quality may be accepted up to the 15th, printing scheduled allowing. Any material we receive that is too late for the designated issue will be held for the next following issue. Contributions may be edited for grammar/spelling, brevity, or factual accuracy. Significant editorial changes will be discussed with the author prior to publication.

Cooperation of advertizers and contributors is requested so that we can maintain an efficient publication schedule, and so the editor can continue to produce a quality magazine in the time available. Thank you.

AERIE

The publisher of AERIE has contacted the editor and offered his apparently-sincere apologies for the overly-extensive use of Updraft material in that publication. Arrangements have been made for NEWS items from Updraft to appear in Aerie on a regular basis. Feature articles, technical pieces, and other non-news items will appear only by the prior agreement of the author, and such material will be PAID for by Aerie. This makes Aerie one of the few hang gliding publications in existance which pays for material, and hopefully will serve to attract material from top-quality sources. Payments for material that appeared first in Updraft will go directly to the author, with a note to appear in Aerie that WMHGA published the material first. Authors may, of course, submit material directly to Aerie if they wish.

## UPDATE ON SITES

SKINNER: The half-way trail is now passable without crampons, although just barely so. The road to the top is still clogged with snow and ice on the north corner of the mountain and the gate is still locked. Take off and landing areas are completely clear of ice and snow.

Members who have traveled to DNR in Amherst to get their '76 permits will note that they expire on May 1st. This is because the park is to open on May 1st, and from that time on, permits will be issued on a daily basis at the ranger station at the old hotel. This will serve to make the trip to Amherst unnecessary for those who choose to delay their flying until they can drive to the top, or for those who live a long way from Amherst. WMHGA members who have a Class 3 or better rating and GSI coverage will be eligible to get the permits, which will be free. Non-WMHGA class 4 flyers will also be eligible, so long as they have GSI or equivalent coverage. Applications have been sent to ConnHGA and the Windward Club, so that the flyers from those organizations who wish to fly with us this spring can avoid the trek to Amherst. Any Class 2 flyer (provisional 3?) who wants to fly the top in pursuit of a Class 3 rating must be accompanied by a GSI rated instructor, who will determine whether suitable conditions prevail.

Mt. TOM: WHYN Stations Corp. has decided against opening Mt. Tom as a regulated club site. Therefore, all use of the road to the top remains illegal, as does any tresspass on TV-40's property on Mt Tom. Pilots are advised to avoid hassle by continuing to use the hiking trail for access to the top of Mt Tom. We are hoping that the WHYN management may yet change their minds when they see that they cannot stop people from flying here, and that their refusal to allow the use of the road will result only in WHYN's failure to receive insurance coverage for the flying which will, undoubtedly, continue.

The trail starting at the Log Cabin is now completely free of ice and snow, as is the launch area on the cliff, so the mountain is now as accessible as it will ever be unless TV-40 changes it's position.

N. SUGARLOAF: Flyers who use this site are reminded that the top is DNR property, and permission has not yet been granted to open it up. The landing zone is private property, and permission for its use HAS been given. However, all pilots MUST have a waiver form with them when they fly there, and be ready to hand one over to the landowner upon request. Failure to do so could jeopardize our further use of the site, so BE SURE TO HAVE A WAIVER FORM WITH YOU. Dan Poynter's book contains a fine suggested form, which pilots should copy for their use.

POET'S SEAT: By the time you read this, Poet's Seat will be officially open for flying. Permits are to be obtained on a daily basis at the Greenfield Police Station, and any Class 2 flyer with GSI insurance and cliff-launching skills can get one. The road to the top is open and is clear of ice and snow.

GREYLOCK: Still closed due to ice and snow on the access road.

PETERSBURG PASS: No new hazards have developed since last month's report, and the situation there is the same.

## SAFETY REPORT

Fatality figures are in for the year 1975, and despite a number of deaths, the figures are encouraging. There were 34 hang gliding fatalities in '75, according to our source, which compares with almost a hundred in 1974, when there were only half or a third as many people flying. It appears that self-regulation, along with better dissemination of information and the widespread availabil-

ity of instruction have contributed to a dramatic increase in the safety of untra-light aviation. We feel that the trend is likely to continue, as all of the above factors are increasing in their effect; also, the new equipment appears to be safer than the standard Rogallos that pilots were limited to in past years. Let's keep up the good work.

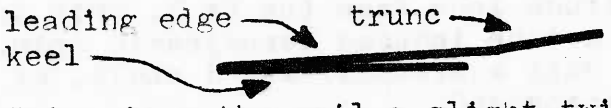
## FINITE TIPS FOR INFINITE SKY

by Chuck LaVersa

With the ever-increasing number of higher-performance hang gliders on the market, we are seeing, not surprisingly, more and more "tip-gliders." These are gliders with truncated, or cut-off, wing tips. The most important reasons for this are often the most subtle.

Bolting a "tip" or "trunc" on a wing allows you to have a fixed, integral part of your airframe controlling the outermost section of your wing. Unlike battened tips, which do some of the same work as truncated tips, full truncs do their job even in the case of a completely collapsed sail.

Finite tips, or "truncs", are mounted tipped up at an angle several degrees from parallel to the keel.

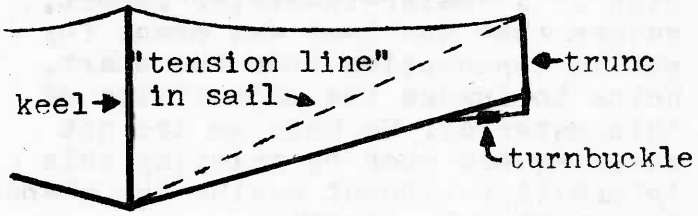



This gives the sail a slight twist from root to tip which serves several purposes.

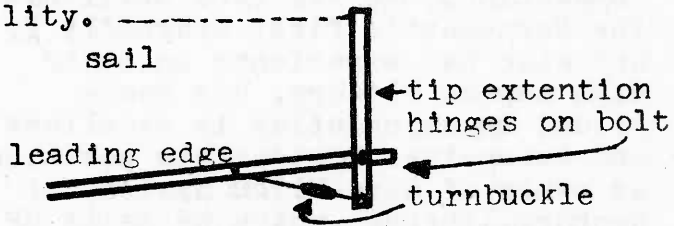
First, it creates washout. This is localized in a section of sail on each wingtip that is flared upward at the trailing edge - creating some drag, but adding greatly to pitch and yaw stability. It is equal in function to the tail section of a normal airplane, with horizontal and vertical stabilizers. You can think of the upturned tip, which is also the rear-most part of the aircraft, as maintaining a rigid "up-elevator" configuration - quite a nice thing to have, especially in a luffing-sail situation!

Second, the tipping upwards of the truncated tip means that the wingtips are at a lower angle of attack than the inboard portion of the wing, and therefore less subject to tip-stalls and their precipitate, the spin.

Tip gliders also make use of various tensioning devices to assure positive pitch stability. I am most familiar with the simple cable and turnbuckle arrangement used on UP's Dragonfly. (Ed's note: also in use on the Dragonfly II, the Sun IV, Cumulus Vb, and Wind Gypsy.)




The turnbuckles are adjusted to give an equal "tension line" on each wing from the tip of the trunc to the tip of the nose plate, which helps to more effectively do the same job as is normally assigned to the reflex in the keel: pitch stability.




Truncated tips also help reduce wing tip vortices and deter induced drag. Overall, the tip gliders have proven to be safer and more stable in all modes of flight than the "infinite tip" gliders that the majority of pilots have been working with. Truncs have proven to be a workable solution to many aerodynamic problems, and are a welcome addition to the ever-increasing accumulation of hang glider technology.

## PILOT REPORT: DRAGONFLY MK. II

An UPDRAFT Exclusive!

Thanks to Blaise Thompson of Danbury Conn., Updraft is able to bring you the first published pilot

report on the newest addition to the growing list of third-generation high performance hang gliders. This report was obtained in conversation with Blaise, who had just returned from the factory in California, and who had just flown the Mk II. Since your slow-thinking editor didn't get the idea of publishing the report in Updraft until Blaise had left for Europe, this article must be based upon a verbal conversation, rather than a written report. However, as both your editor and Mr Thompson are UP dealers, we feel that reproduction of a dealer-to-dealer report, rather than one that was meant for public consumption from the start, helps to insure the objectivity of this material. We hope we are not assuming too much by printing this information without having the chance to ask Blaise, first!

Blaise Thompson is one of the region's more experienced hang glider pilots, having several years of foot-launched experience, much of which was obtained in Southern Califonia prior to his settling in Connecticut. He had (and still has) the Northeast's first Dragonfly I, and also has experience on other high aspect gliders. His background in aeronautics is excellent and extensive. Besides his position as owner of Sure-Flight Systems of Danbury, through which he sells UP and Sport Kites gliders, he is a professional air transport pilot, and earns his primary income flying Boing 747's on cross-continent and trans-Atlantic routes for a major airline.

The primary visible difference between the Mk II and the old Mk I is the addition of five battens per side. Although slight, the subtle aerodynamic changes in the sail are sufficient to provide sugnificant changes in the performance and handling of the glider.

At low speeds (stall to 20mph) the sink rate is significantly lower, allowing the glider to soar in even less wind than the Mk I. Stall speed is slightly lower, too. (The Mk I stalled at 12 mph.) Stability at low speeds is significantly improved, with absolutely no tendency to drop a wing, even when stalled in a turn, or in a full parachute decent. Sink rate in the parachute mode is dramatically reduced, Blaise reporting that he made a twenty-foot parachute drop with no effort required to keep the glider level and over him, and with a touchdown so light that you "literally could've put an egg under the control bar without breaking it." This was accomplished in conditions prevailing after a soaring flight! L/D at very low speeds is also improved greatly.

At moderate speeds (20-30 mph) both sink rate and L/D are noticably improved. "Not doubled or halved or anything like that," but enough so you can tell just flying along. (The Mk I was flying in the 7:1, 250 ft/min performance range.) This would require significantly more than 7:1 for L/D and significantly less than 250'/m sink rate. Handling is even better than the Mk I, with less loss of altitude in banks and turns, and more precise turns possible. Spins are harder to induce, and must be induced deliberately, as the stall is so gentle and mellow that one should find it almost impossible to stall accidentally, even in tight turns. The spin is easily controllable, and easily recovered with less altitude loss than the Mk I. This is for a true induced aerodynamic spin, not just a steeply banked stall, or a sloppy 360.

At high speeds (30-40+ mph) the improvement is greatest. Top speed is much higher than the Mk I (which topped out at about 40) and acceleration, even from high initial speeds, is brisk and without hesitation. L/D and sink rate do not degenerate nearly as much as the earlier model at high speeds, making for tremendous penetration ability.

In summary, the new ship has a significant increase in performance at all speeds, but especially at the extremes of the even-wider speed range. Handling is improved at all airspeeds, making the new ship not only hotter, but easier to fly.

## SKINNER STATE PARK

### Our Very Own Mountain

Since many club members have not yet flown the top of Skinner, and some have not even flown 'the slot', we felt it was time to do our monthly site report on our own primary site: Skinner Park on Rt 47 in Hadley.

This site is located on the Joseph Skinner State Park on Mt. Holyoke, which is a 750' ridge facing northwest (310°), right into the prevailing winds. There is also a small training hill available at the bottom of the mountain. The park is operated by the Mass Dept of Natural Resourses, and is managed for flying by WMHGA. Proceedures for being allowed to fly the mountain are printed elsewhere in this issue.

Upon arrival at the park, in the off-season, permit in hand, one is faced with a 650' climb from the reservation gate, which is at the 100' level. A trek up the road leads to the beginning of the half-way trail, which is a marked trail from the road to the top. When the park is open, the proceedure is to drive to the mountaintop hotel, and get a day permit from the ranger on duty. Once at the top of the mountain, a walk down the trail along the top of the ridge will lead to the launching area, a clearing at the clifftop allowing room to set up two kites with relative ease, or three in a pinch. Launch is a semi-cliff take-off - the hill is extremely steep, almost vertical, but there is enough of a slope that an extra step is available if required. A stunch on take off would result in a steep slide to the bottom of a fifty-foot slope, rather than a fall over a precipice. Clearing the trees on launch is easy, even with a slight downhill drift; however, some pilots have managed to eat pine on launch. We have to wonder how, as this is probably the world's easiest high-mountain take off! The only real hazard is that you must be careful not to trip over the stumps of the trees that were cut to make the clearing.

Once you're airborn, if soaring conditions prevail, you can turn in either direction. To the north, in the direction of the hotel, the slope is steep and usually provides excellent lift. To the south, there are vertical cliff sections that also provide excellent lift, but beware! the mountain begins to fall off to the south, and it's possible to get out of range of the landing zone and still be at ridgetop level. Pilots should avoid going too far south in marginal conditions.

The mountain is steep, so high altitudes above ground level are possible, as well as excellent soaring. The landing zone is a giant field directly below the take-off point. Note: this field is bisected by a set of live high-tension wires, and only the far half of the field, along Rt 47, is the landing zone. Landings behind the wires are possible, but are usually the result of extremely poor judgement and/or super-strong headwinds. The wires run paralell to the ridge, in the middle of the field, and are quite hard to see from the air, so don't fly until you know exactly where they are - then remember them until you're on the ground.

Alternate landing zones appear to abound from the top, but a close inspection reveals that they are NOT available - they're almost all conjested with power lines. Use only the primary landing zone if approaching from the south. To the north, the only alternate is Mr Johnson's field, which is clear of wires except near the house and near the trees. This LZ is fairly far from the top launch point, however, and is not really much easier to reach.

For pilots not yet ready for a major mountain flight, there is a ski trail extending up from the top of the field for about 115 vertical feet. Since the field is slanted up for a total distance of 100 vertical feet, this altitude may be partly added to the height of the "Slot."

The first launch point in the slot is at the 75' level, and flights from here in a standard will end at

a point just short of the wires, for a total vertical drop of about 125'. This is suitable for class 1 pilots, but these flyers should beware - the "Slot" is narrow, and sets up some real turbulence when there's any significant wind blowing up it. The turbulence is severe in a crosswind, but will be present to some degree even in light, straight-on breezes.

The top of the slot is 40' higher than the midstation launch point, and is even narrower. Flights to treetop level and higher are possible due to the steepness of the hill, and the top end of the slot is even narrower than the bottom. The turbulence is worse, and it is possible to fly into the wires on a good flight. Anyone flying from the top of the slot, then, should know for certain that they can make a quick 90° turn at will, or they're asking for trouble.

For real novices, there's a small bump in the middle of the field that allows a quick take-off and landing, and a few places in the field that are steep enough to get off for a few seconds with a keel assist. High aspect kites are capable of launching, and long ground-skimming flights, from various points in the field, but it can't be done in anything resembling a standard.

Skinner, also called Mitch's or Mt Holyoke, is the main site for WMHGA mambers, and flyers interested in utilizing this area should contact the WMHGA.

## SOARIN' SKINNER

by Greg Martin

Well, it looked like it was going to be a perfect day for flying, and after I heard a weather report, it looked as though I was finally going to get a chance to soar for my first time. The 750' mountain was facing straight into the wind, which was doing a steady 16, and at this point everything looked good except for the fact that we were at the bottom of the mountain, and it was a long walk to the top!

After a 40-minute hike, we got to the take-off point, where John Dempsey was soaring three- to four hundred feet above us, in what looked like the smoothest air you could ask for.

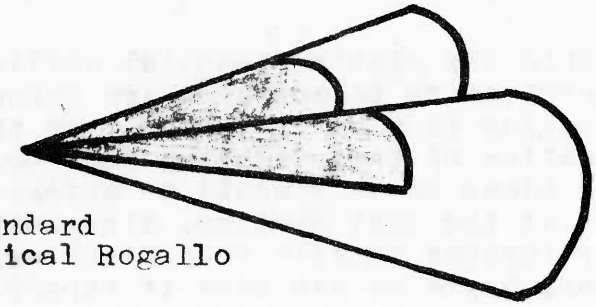
Eventually the time came when all was ready. Chuck would assist me on take-off, and was holding the nose of the kite down as we slowly eased our way to the edge of the cliff. It looked good, so I told Chuck to let go as I took two or three steps forward. The wings of the kite gathered a full gust of wind and sent me out into space. I rose 75' or so, and turned to the north along the crest of the mountain. The lift was good, so I made seven or eight passes before I broke through the lift band and started loosing altitude with my turns.

It was a warm day, and I hit a few thermal bumps as I made my landing approach, which consisted of three or four 90° turns and a fast but safe landing. I didn't break any records that day, and probably never will, but to experience just ten minutes of this kind of flying is well rewarding.

## SEAGULL AIRCRAFT

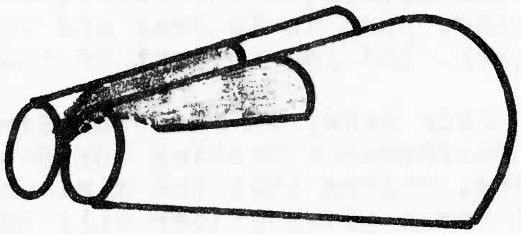
One of the oldest manufacturers of hang gliders, Seagull Aircraft was founded in 1971 by President Mike Riggs and Vice-President Bob Keeler. In the ensuing years, the Santa Monica facility has destinguished itself by the introduction of a series of unique and distinguished hang gliders. True pioneers in the R&D department, Seagull introduced the world's first non-standard production flexwing as early as 1972.

Seagull's designed have been characterised by the use of cambered leading edges, forming a truncated-conical Rogallo. By way of explaination, the standard Rogallo is called a "conical Rogallo": if you put two cones side-by side, meeting at the pointed ends, then slice them in half, the resulting shape will be a Rogallo wing (see illustration.)



Standard
conical Rogallo

The concept of a truncated Rogallo wing is based upon the shape obtained by applying the same proceedure to a pair of truncated cones:



The truncated conical Rogallo offers a superior sink rate and a low stall speed, combined with good maneuverability, at the cost of top speed and penetration. Oddly enough, despite the lack of a high top speed and the lower-than-normal stall and minimum sink speeds, the truncated Rogallo obtains it's best L/D at a speed significantly higher than a standard, meaning that L/D degeneration at near-top speeds is minumal. Another benefit of the truncated Rogallo is the ability of the glider to carry a wider range of payload for a given sized ship.

## The Gliders

Seagull I & II: Two different sizes of standard Rogallos, both now out of production, and no known examples exist on the East Coast.

Seagull III: Introduced in 1972, the Seagull III holds an impressive list of 'firsts' to its credit, including being the world's first production short-keeled Rogallo, the world's first truncated-conical Rogallo, the first production 'high performance' hang glider, and the first (and only) glider to have a seperate competition class established for its pilots.

Available in only one size, 19 by 17, the Seagull III is capable of operating properly with a wide range of wing loadings. This factor has made it the most popular one-size, one design aircraft in existence.

Flight characteristics include a low stall speed, low minimum sink speed, very low sink rate, and good maneuverability when compared to a standard Rogallo. Top speed and penetration are its main weaknesses, but in the hands of a large pilot, these factors are not a major problem. L/D is about the same as a standard Rogallo, and top speed is less.

Seagull V: Introduced before the IV, due to the extended development time required by that model, the V was an attempt to produce an all-out sink rate machine. No longer in production, due to its complexity and cost, the V is still available on the used kite market. The V's most distinguishing characteristic was the use of a large rudder to achieve controlability at low speeds with its extra wide (120°) nose. This glider was one of the all-time floaters, soarable in only the mildest of breezes. However, it was a bit of a handful in strong winds or turbulence, and didn't offer much of an all-around increase in performance over the Seagull IV. This is why it was taken out of production when the simpler, cheaper IV was finally ready for production.

Seagull IV: Latest effort from the Seagull factory is the IV. Featuring the same airframe dimentions as the III (19/17, 102° nose), the Four has a fully cambered keel as well as a different curve to the cambered leading edges, and a scallopped sail. It offers an even lower sink rate than the III, along with a much better L/D. Over a year of development time went into the IV, to produce an easy-to-fly, high performance aircraft. It's flight characteristics are much like the Seagull III, except that it isn't quite so forgiving of pilot error, and it does 'most everything better than the III.

## ODDS 'N' ENDS

### And Items Of Interest

WALT NIEMI of the Fitchburg-based Windward Kite & Glider Club extends the advice to all pilots to be sure to check the condition of your swing seat webbing or rope as part of your pre-flight check. Of special importance is the area at the corner of the seat, where the straps rise to meet the apex of the control frame.

Walt had a rather hairy experience at Mt Abrams recently, when a webbing strap broke in two a few seconds after launch, leading him to make a rapid and unplanned exit from his Phoenix. Luckily he fell only about twenty feet onto snow, and was uninjured. It's a good thing he was at Mt Abrams - alternate plans for the day were to come out and fly at Mt Tom with us. Had the incident happened there, it would've been bye-bye Walt!

New equipment is not exempt from failure, as the seat he was using was only three flights old.

SPENCE SMITH sends us his out-west address, for the duration of his trip, and says he'd like to hear from the local pilots. Reach him c/o 1016 Sierra Vista, Apt 3, Las Vegas, Nevada. He also tells us that he's trying to sell his Kestrel; interested parties may contact him directly, or inquire at the MGS shop. Since we don't want to be accused of copping free advertizing in these pages, we won't say what he's planning to replace it with. ( Could it be a Mk II what?)

JOHN O'SHAUGHNESSY and KIETH BURELLE have both proposed that we undertake construction of a wind velocity and direction indicator as a club project. The device would be located on top of either Mt Tom or Mt Holyoke, and would transmit data to a central point, eliminating the requirement of climbing up the mountain to see what the wind is doing up there. Such a project is within the club's financial ability. Questions to be answered are those relating to a power source, and the location of the receiving station. Any ideas on this would be appreciated at the next meeting, along with any further details from Kieth or John. Maybe we can make it happen.

DOUKA KAKNES, writing in AERIE, suggests that pilots keep in mind that TURBULENCE from any given source increases both in extent and strength with the square of the increase in velocity, just as do drag and wind strength. Had you thought of that?

JACK PARK, in his book Simplified Performance Testing For Hang Gliders, states that the minimum sink speed for a given glider will be .76 times the maximum L/D speed. For example, if your kite stalls at 16mph, your minimum sink will probably come at about 17 or 18 mph, which would put your max L/D at 18x.76, or about 25 mph. He doesn't state whether the figure applies to all wings, or just to the standard Rogallo configuration From what we've seen, the figure is pretty close in regard to the high performance gliders we're familiar with.

Pilots who have layed off of flying for the winter are reminded to tread carefully when getting back into the air this spring. We've been noticing that it's incredible how rusty you can get after even a month or so away from flying. Sloppy turns, excessive altitude loss in maneuvers, poor approaches, poor judgement of factors like wind drift and airspeed, and missed landing zones are to be watched out for.

BOB POULIS has done what everyone else has talked about but never bothered to do - he put up a windsock on Mitch's barn. This will make it much easier to set up a proper approach to the landing zone. Thanks, Bob. But now, how about a ground wire on that pole, so Mitch's barn desn't get burned to the ground in the first thunderstorm of the spring!

JOHN DEMPSEY, BOB PERWAK, JACK McMILLAN and RANDALL PAGE made an interesting discovery at Skinner on a blown-out day recently. Searching the back side of the mountain for a lost kite (toy type - not a glider!) they stumbled - literally - upon the remains of an airplane. The plane appears to be an old (vintage 30's or 40's) light-to-medium twin engine monoplane. The aircraft seems to have impacted with great force into a rocky area, and exploded and burned upon impact. Parts are strewn in a wide area around the impact point, and the resulting fire was so severe that one engine was melted into a lump of slag attatched to the remains of a propeller. The crash is quite old, as the aluminum is corroded to the point where it looks like lumps of concrete rather than metal, and the area is thoroughly overgrown. No human remains were found, but the age of the crash site and the severity of the fire make it possible that none were ever remcved. The implication is that this may possibly be an unreported crash. The plane is not located anywhere near any trails or other areas where hikers would be likely to find it, and the terrain is such that it might not be visible from the air. Since aircraft tend to fly into mountains during bad weather, and the fire may have burnt itself out quickly, there is a slim possibility that the crash site was never before located. The plane is located about a third of the way down the back side of the mountain, directly behind the take-off area. We're curious to discover what kind of plane it was, when it went in, and whether it is on record.

Some of the more experienced flyers will probably have noticed a real shift in the mood exhibited at hang glider meets in the past year. Two seasons ago, meets were all for fun, with little emphesis on the competitive aspect of the flying. Last year, with big money often available, and factory sponsorship for the top flyers, world cup participation at issue, there was a much more pressured atmosphere. Not only was the competition keener, but the attitude of some flyers became downright cutthroat. Perhaps it is symptomatic that last year, attendance at meets declined over the previous year, in spite of the much vaster number of active pilots. It is no surprise to hear many top flyers stating that they will not compete at all this season.

In response to this situation, the Challenge Cup Series has been instituted. This is to be a series of inter-club meets, featuring low-keyed competition. While the factory backed professional flyers beat each other's brains out for the big money, the rest of us will still have a chance to see how our flying skills compare with those of other flyers.

While serious, big-time competition is essential to provide an incentive for manufacturers to constantly improve and upgrade the equipment we will all eventually fly, we feel that the low-keyed meets such as the Challenge Cup will make for more enjoyment for most pilots, and also serve as a training ground for the future's professional competitors.

The first Challenge Cup meet is to be held between the Windward Club and the New England Bushwackers at a time to be announced. It is hoped that other clubs will come forward to challenge the winners, and that a series of meets will be held at various sites throughout the season. We hope that WMHGA will participate in the series. More information will be forthcoming in future issues.

## FINAL REMINDER

Members are reminded once again to renew their membership in WMHGA. Bring your six bucks to the next meeting, or send to John Dempsey. If paying by mail, don't forget to include your name and address, as well as your phone number, if any. See you next month. Sky Out!!!