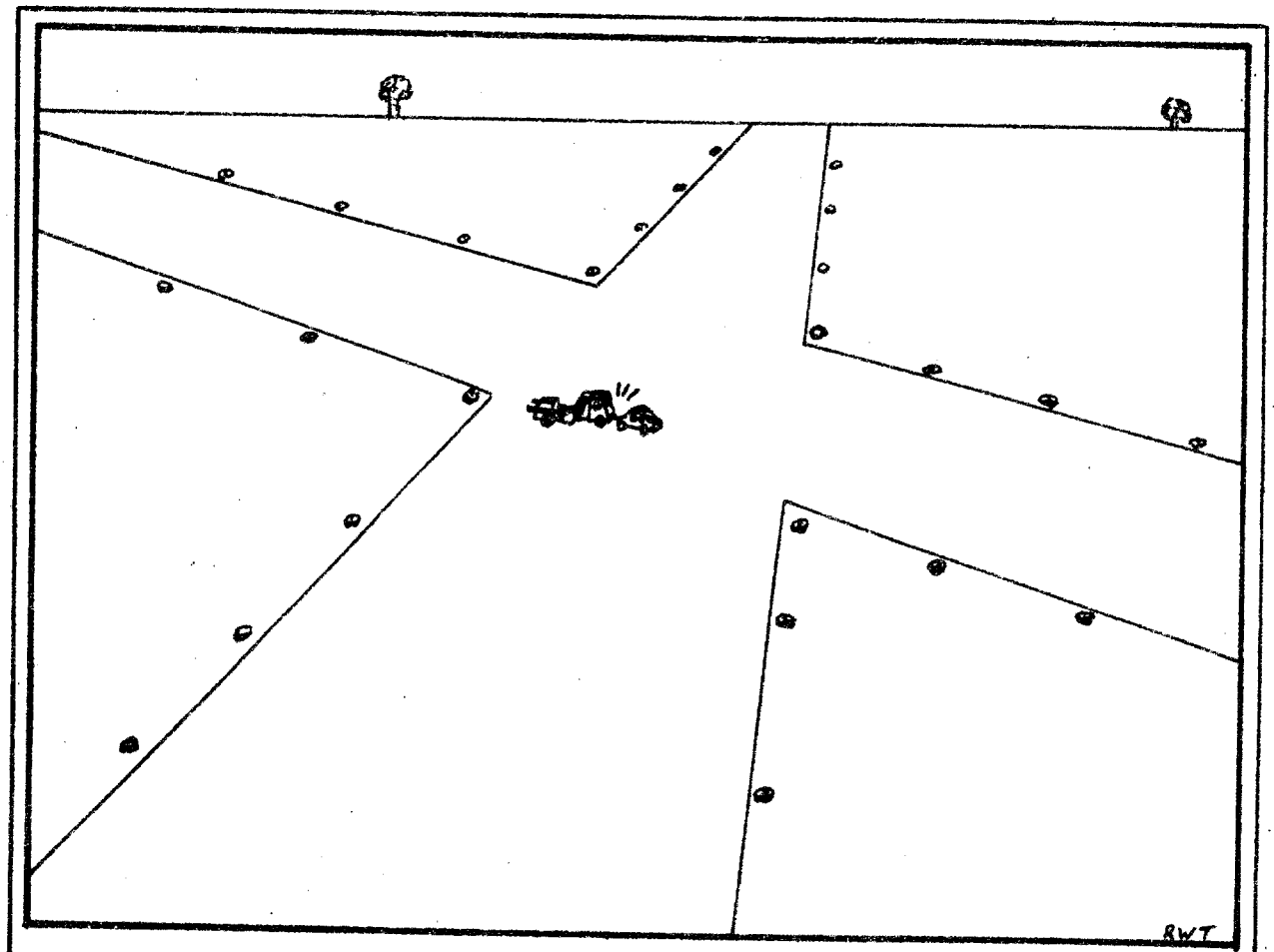
UNI GLIDING

AUGUST 1982



PILOTS MUST TAKE PARTICULAR CARE IN CROWDED SITUATIONS.

NEXT MEETING: Wednesday, September 1, 7.30pm., Jerry Portus Room

AGENDA: 1. Business
2. Training (a) Rules of the Air - Graeme Newcombe
(b) Pilot Qualifications - Andrew Sawye
3. Film "Two Niner Juliet" - at long last!!!
4. Coffee and Crepes.

NEWSLETTER OF THE ADELAIDE UNIVERSITY GLIDING CLUB INC.
REGISTERED BY AUSTRALIA POST PUBLICATION No. SBH 1918

TREASURER'S REPORT

Statement of Accounts at 27/7/82

1. Liquid Assets:

Cash and cheques in hand:	$2,245.19+
Operating Account (National Bank) - Uncommitted:	69.56
Savings Investment Account (Commonwealth Bank):	1,265.42
TOTAL:	$3,580.17

+ Includes $2,229 of insurance payouts.

2. Unpaid Invoices to Hand:
   Miscellaneous: $157.06

3. Sports Association Grants: (balances unused)
   Annual Operating Grant: $422.10
   Capital Equipment Grant: $500 (for purchase of parachute)

4. Members Accounts:

a) Accounts in Credit: Total value: $294
Less provision for inactive accounts: 115
Nett value: $179

b) Accounts in Debt: Total value: $804
Less provision for bad debts: 272
Nett value: $532

JULY FLYING STATISTICS

Total Number of Launches at Lochiel: 165 (last month: 24
Total Flying Time by Club Aircraft: 17 hr. 23 min. (29 hr. 7 min

A PASSING NOTE

It is with a great deal of sadness that we note the death of Guy's father, Dr. James F. Harley, in the early hours of Tuesday, July 27th., after a long illness.

Several years ago the club was donated the Dr. J.F. Harley Cross Country Trophy which was an attempt to stimulate cross country flying within the then fledgling club. The trophy has since been awarded each year for either the longest flight, or the most meritorious flight made by a club member or team in the previous y

Dr. Harley also participated in club activities by opening his house to us on several occasions for club gatherings and parties.

His support of the club will truly be missed.

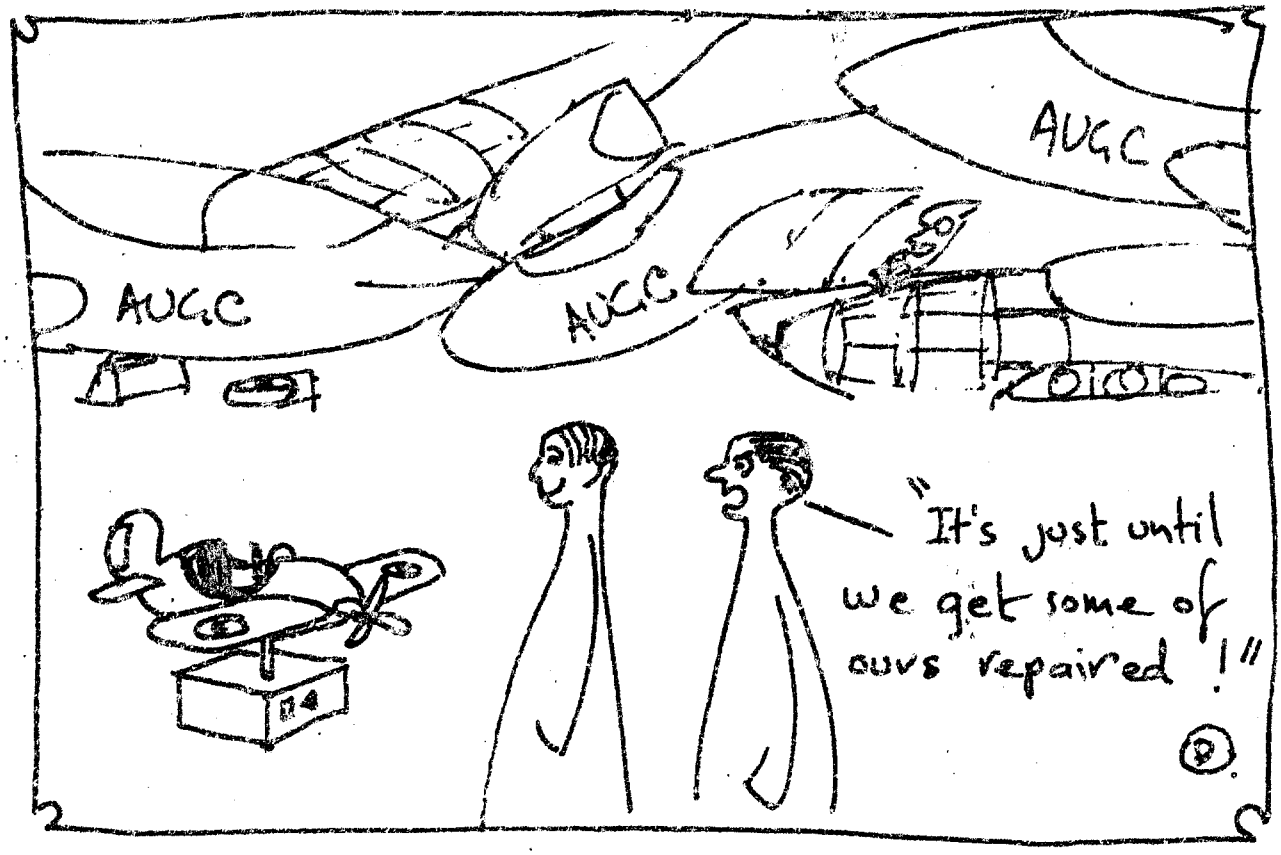
UPDATE

AUGUST CAMP

There will definitely be a week of flying during the August holidays (August 21 - 29) at Lochiel. The shearers quarters will be available and there will be an instructor on field on each day of camp. To date we have enough people to make flying possible on every day except the Friday. More people would certainly be welcome and plenty of flying will be available to everyone.
If you are contemplating on coming on the camp either for a few days or for the full length of the camp please contact Dene Larwood as soon as possible so that numbers can be ascertained.

BERGFALKE

As is obvious from some of the cartoons and comments in other places in the Newsletter there has been some problems with progressing with work on the Bergfalke.
However, after a group effort on Sunday (Aug. 1) and a full day's solo effort by Bob Giles the following day the fuselage frame has been undercoated and painted.
The fuselage is now ready for the application of the fabric. Another group effort should see the job completed quickly.
Both Don and his wife are anxious that the job be finished soon so that they can have their garage back.



WINCH REPORT

1. Thanks to the hard work of the Kadina boys there has been much improvement to the running of the V8 and the head of the Thame: motor has been dismantled in search of water leaks. This was done mid-week without holding up flying.

2. Cable Care

There are two ways of operating.

1. Completely ignore deteriorating cable and have lots of cal breaks with much wasted time and irate tempers etc.
2. Use time between launches, especially during ridge days, t check cable and cut out "daggy bits".

Experience has shown conclusively that the latter way pays divi dends. Please try and keep a step ahead of troubles in this are by being 'on the ball'.

PREVENTIVE CARE OF THE WINCH IS AN INTEGRAL PART OF WINCH DRIVING.

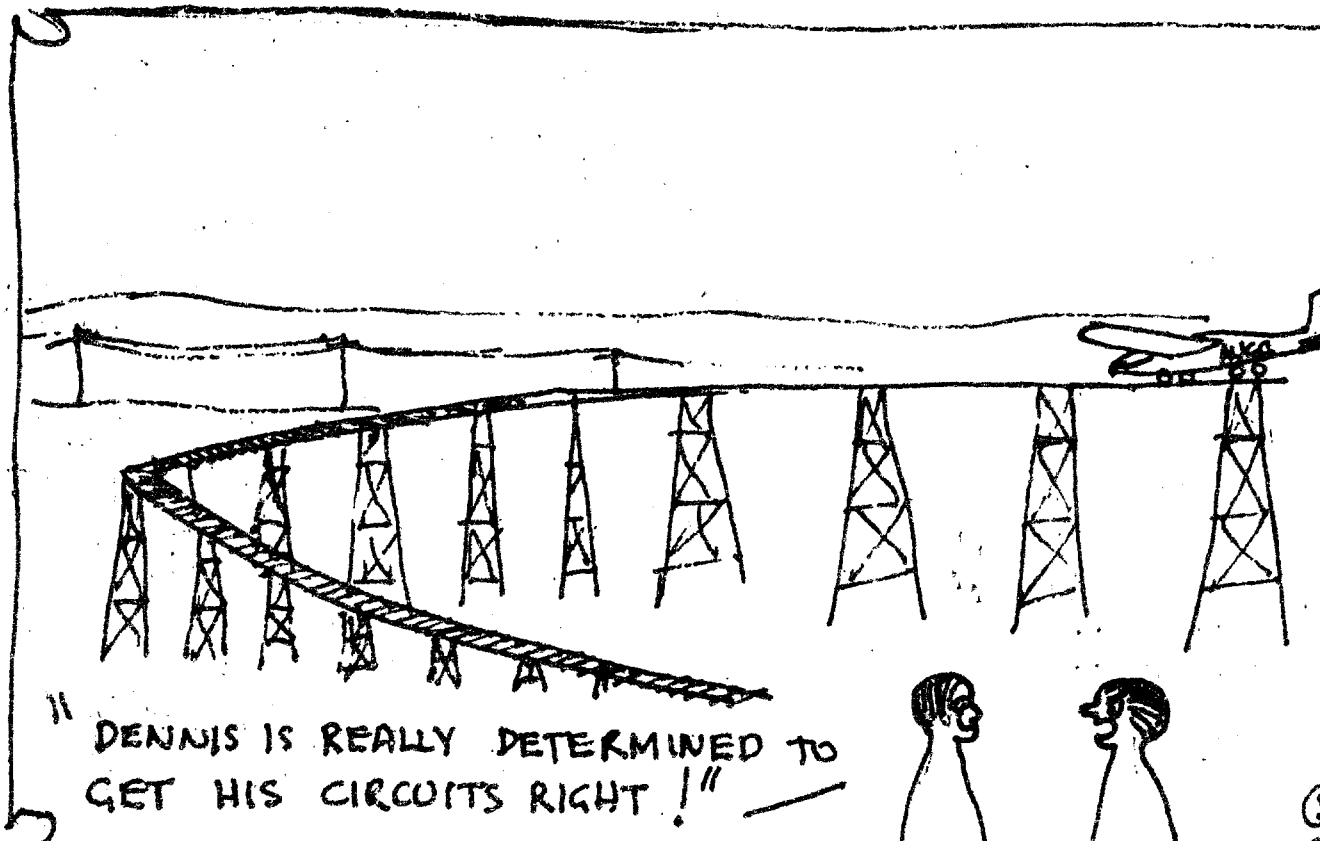
3. Winch log

People are starting to use the log kept in the winch - thank yo The information noted is valuable in planning winch maintenance and repairs.

4. Driving the winch

Please do not drive the winch as if it were a stock car. Wreckl ness is catching. Drive and care for the winch as if the whole of our flying depends on it - it does!!

Andrew Sawyer



YES!!!
SHE'S BACK!!!
IS IT A BIRD? IS IT A PLANE??? IS IT A FOKA-5???
NO!! IT'S (FASTER THAN A SPEEDING BULLET AND STRONGER THAN THE EXHAUST OF A SPEEDING BELLET).....
.....AUNTIE AMY BIGGLES AND HER FAMOUS PROBLEM SOLVING COLUMN.....

Dear Auntie,

We are writing to you instead of leaving the usual mundane suicide note at the bedside, etc.

My husband and I can't quite work out what has happened, but all we know is that we are eight grand down the drain, and our double garage, built for our two Triumph cars, has now been taken over by a glider.

It's not so much the lack of space nor the council notes about rubbish in the front yard, but it's the sickening sight of seeing our only son cuddling, fondling and generally molesting this inanimate object.

Shouldn't he be flying it???

Dear Mr. and Mrs. F.,

I wish, my dears, I could give you solace, but, alas, we are afraid it hasn't stopped there. In fact, only the other day, not content with simply rubbing back the Foka, we caught him in Don's shed (nobody home) in a frenzy - stripping the Bergfalke and shouting, "she's got to be done properly!"

Dear Auntie Amy,

I am concerned about a glider that has been in our garage since time began. Every now and then a group of people come and build the thing up, then another group of people comes and pulls it to pieces again.

Shouldn't they be flying it?

And have you seen my husband lately?

Dear Mrs. H.,

There is an easy answer to each of your questions.

a)We find we don't prang them as much this way.

b)Last seen inspecting inside the frame of the Bergy as we were covering it.

Dear Auntie Amy,

Having just completed covering the Bergy we have noticed that 1)the C of G has moved dramatically rearwards and

2)that we get a strange groaning sound from the rear of the aircra when applying full back stick.

Can you help?

Dear Crew,

Certainly - you have to apply a test.

Try throwing a few cheese sandwiches occasionally to the rear of the aircraft.

Dear Aunty Amy,

We are concerned about a bar that is being rebuilt in our cellar. It has been there for years, but recently is recent beginning to look like a glider wing.....

Next month Auntie Amy Biggles will return.....

Shades of the Marx Brothers. Here's a trio that could make "Horsefeathers" soar!

Marty, Bruce, and I at Taos

text by PETER ROEMER

cartoons by SHEILA LYNN STERKEL

Marty, Bruce, and I are going to Taos. Marty is an engineer with a New York newspaper. Bruce flies for an airline which won't publicly admit he's one of their pilots. I am the vice-president in charge of odds and ends at a small business. Together, our soaring knowledge and expertise is awe-inspiring — given enough beer and an audience of pretty young ladies.

"Sailplanes? Sure, I fly 'em — long wings and no engines — right? You circle in a thermal, then fly straight for a while. Do it twice for Silver, 10 times for Gold, and 20 times for a Diamond. If you're alive 24 hours after the landing, it's a legal badge flight."

Bruce has forgotten to send in his Taos reservation. But Marty is a true friend. He has offered to sign on Bruce as his crew. Provided, of course, that Bruce will loan Marty his sailplane, a Schweizer 1-34 based at Black Forest. Marty has generously offered to let Bruce fly his (Bruce's) sailplane, *Green Slime*, whenever he (Marty) isn't using it.

Never one to be bothered by crass materialistic compromises, I am the proud owner of 232 pounds of the finest sailplane that 3500 dollars can buy — a Monnett ("It-hasn't-killed-me yet") *Monerai*. Ah, the privileges of ownership — Marty and Bruce don't know it yet, but they are both crewing for me.

We meet at Black Forest Gliderport to prepare for the drive to Taos. Bruce can't find his trailer. Bruce has never seen his trailer — he bought *Green Slime* assembled. We find a 1-34 trailer. It needs a few parts. We cut up a rug from a dog pen for padding on the wing cradles. We make a few adjustments. We buy a 12-pound sledge hammer and make a few more adjustments. None of us has ever disassembled or trailered a 1-34. A crowd gathers in the assembly area.

The moment of truth: We pull off a wing.

The next moment of truth: It's the wrong wing. A spectator catches the fuselage. He's trying to stop laughing. With the help of about 12 people we have both wings, both horizontal tails, the canopy, and the fuselage spread out on 2 or 3 acres of the Black Forest Gliderport. Twenty of us lift the fuselage onto the trailer. The plywood cracks as Bruce steps on it.

"It's still O.K. where the wheel sets," he says authoritatively.

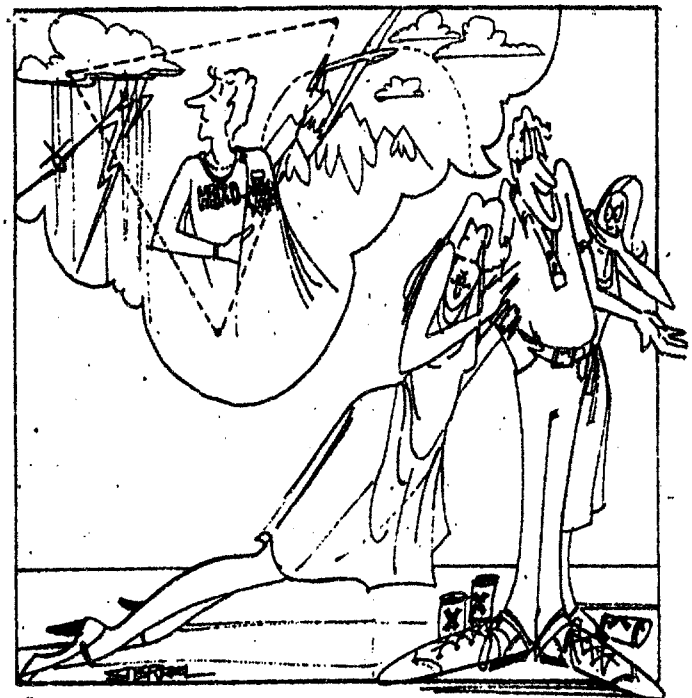
Three hours later, all of *Green Slime* is on the trailer.

"Not bad for amateurs! A little body filler and paint and it'll be good as new."

"Why doesn't this trailer plug match the station wagon's?"

Bruce has just purchased a station wagon for a crew car. It has 100,000 miles on it. The wiring to the trailer has to be redone.

"Sure, I can show you how. I wired my trailer four times. The lights work fine now — sometimes.



"TOGETHER, OUR SOARING KNOWLEDGE AND EXPERTISE IS AWE INSPIRING... GIVEN ENOUGH BEER AND AN AUDIENCE OF PRETTY YOUNG LADIES."

"By the way, where is Taos?"

"You can't miss it! Just take 160 in Walsenburgh."

We leave in the morning. My *Monerai* follows behind my overloaded Honda which follows *Green Slime* which in turn follows the smoke screen from Bruce's car. Bruce has purchased a case of oil which he expects should last to Taos.

As we stop at the traffic light in Walsenburgh, I realize that Bruce has missed the 160 turnoff. After a bit of horn honking and gesturing, Bruce pulls ahead and angles the trailer, blocking three out of four of the lanes of traffic. When the light changes, Bruce and I are both on 160. We don't look back.

The road to Taos is long, straight, and boring. Marty is driving Bruce's car now and eventually I notice that he is driving on the wrong side of the two-lane road. Fortunately I know Marty, and I'm not worried — driving on the wrong side of the road is Marty's way of staying alert. After 10 or 15 minutes Marty moves back into the right lane.

"You can't miss it. . . ."

But we do. We miss the airport turnoff and find ourselves in downtown Taos. Narrow streets, lots of cars, lots of people. I follow *Green Slime* around the town square. I concentrate on *Green Slime* and try not to think about what or who the tail of my trailer is knocking over. As we inch around the square a second time, I begin to suspect we've made a mistake. I am starting to wonder if the town square will henceforth be called the town

But we find the airport. We assemble the *Monerai* (ten minutes) and the 1-34 (three hours).

"Say, Bruce, did you ever grease or oil these pins?"

"What pins?"

"The spar pins!"

"They should be greased?"

"Well, we might lose the sledge hammer."

The thermals look good, so Bruce offers Marty the first flight. Marty swallows hard, but realizes that Bruce is only his crew so the test flight is his. Bruce assures Marty that the plane is insured, then hooks up the towrope. *Green Slime* flys. Bruce is pleased — or at least surprised.

Early the next day, I take the *Monerai* up on a pattern tow. It's flight number 17 for the ship. I've never flown the *Monerai* anywhere but on Black Forest's mile-square field. Taos has a 75-foot wide runway with lights at each edge and is surrounded by 8-foot high sagebrush for 50 miles in every direction. (Dear George Moffat: Why does my wingspan increase every time I look at that runway?) I land without major damage.

"That's enough excitement for one day," I announce.

I've accidentally rolled to a stop exactly across from the taxiway. I nonchalantly pass it off as a normal landing and hope I don't have to fly again and reveal just how inconsistent my landings really are.

"The wind is too strong," I proclaim.

"Yeah," says Marty, "it's up to five knots already."

"It's too late," I suggest.

"It's eleven o'clock!" Bruce points out.

"The gestalt is all wrong," I declare desperately.

"You haven't sneezed all day," Marty observes evenly.

On Tuesday after Bruce launches on a 300-km triangle, I ponder the value of existence and decide I might as well fly the *Monerai*. If I damage the ship, I won't have to come up with excuses for not flying it for at least a week.

Cloudbase is 19,000 feet and we fly all over the sky (within 30 miles of the field)! Since I'd prepared for cross-country soaring by carefully rereading George Moffat's articles on the technique of leeching, I try to follow a 1-26 I've spotted. Funny, though, after a half hour I haven't been led to any lift at all. (How could I know the young lady in the '26 might be chilly and trying to fly down to a warmer altitude?) Leeching is a great disappointment to me; I'll never believe George Moffat again.

After four and a half hours I decide to land. Interestingly, my arrival coincides with the arrival of a thunderstorm. I land. I can't completely open the canopy because of the wind, but a very kind young lady manages to slip my beer under the edge of the canopy. Then disaster — beer all over the inside of the canopy. This Taos soaring is rough stuff.

Marty has some news for me: Bruce has landed in Questa. I'd wanted to ride to Questa anyway. On the way to Questa, I notice that it is raining. Which is interesting because the windshield wipers on Bruce's car don't work. ("It never rains in New Mexico — the last thing we'll need is windshield wipers.")

I suggest that Marty drive faster to blow the off the windshield. Marty drives slower. Hmmmmm — and I thought I knew Marty. N Questa, Marty and I both remember someone saying that the Questa airport is surrounded b 4-ft. ditch. That doesn't make much sense to u

We hit the ditch. I pick myself up from the (after bouncing off the roof) and turn to Mart

"That was the ditch," I say calmly.

"Yes, I believe it was."

I suppose there are a lot of things that don't make much sense to us.

Bruce and *Green Slime* are a sorry sight. Bruc leaning against a wing, arms wrapped arou the fuselage, and soaking wet. It seems Bruce pulled out the wing pins in anticipation of an retrieve only to have three thunderstorms pass while he waited. The wings worked their way of the fuselage while Bruce frantically put in tiedowns. He couldn't get the pins back into p so he had spent the last three hours running fi one wing to the other alternately shoving them back into the fuselage.

Bruce has also very thoughtfully removed th surfaces — which Marty and I had cleverly dec need not be removed on this retrieve.

"Ah, guys, the people around here said I shouldn't leave the plane alone 'cause the kids would strip it in a minute."

"Well, we'll get it apart in no time. . . ."

"Ah, well, and when I walked to the hambu place to use the phone, they told me not to ge caught out here after dark because of the motorcycle thugs."

The sun has already disappeared behind the

"You grab that wing! Pull this! Forget that! D this! Lift now!"

Lordy, the wings seem light! In 10 minutes G *Slime* is on the trailer, packed up, and ready to As we pull the tiedowns, a motorcyclist roars b circles us once, and roars back down the runwa Marty is in the car with the doors locked and th engine running. We pile in.

"That was the scout," Marty intones with foreboding.

He stares straight ahead, muttering about the differences between the violence in New York a the violence in Questa. (The motorcyclist wavec he went by and said, "Hey! How's it going?" — but Marty and Bruce didn't see it and I didn't mention it.)

I started to tell Bruce about the ditch when w it.

"That was the ditch."

"God! My sailplane was a foot off the trailer!"

"In New York, we get potholes worse than th

Remarkably, none of us lands out during the rest of the week. Landing out means missing the evening pool party. If only we'd realized that sooner! It is all well and good to be an aggressive soaring pilot, but one must have one's priorities straight. In point of fact, the weather for the rest of the week was more appropriate for pool parties than soaring. Which was fine with us. We'd seen Questa, circled in thermals, and flown straight for a while — done all the important things.

All this worked out rather well for us culturally. We had time to explore the city of Taos (dust, adobe, and art galleries), drink a little beer, throw a few people into the pool, discuss Nietzsche, and medicate our sunburns.

Next year, no doubt, we'll all be back. Marty has somewhere located a windshield wiper arm which he proposes to operate by reaching out the side window as he drives. I guess that clears up our operational problems. We make a good team. Soaring Taos can be a real pleasure — when it's done right.

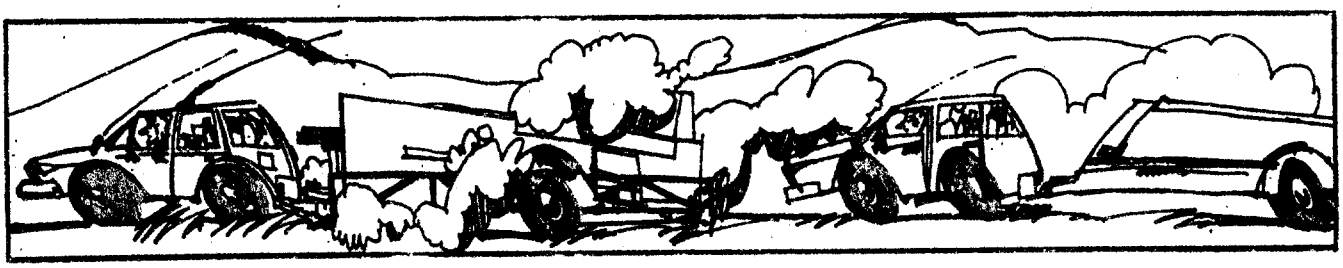
AUTHOR'S BOX

Author **Peter Roemer** enjoyed the indisputable advantage of growing up in a two-airplane family and of having a bush-pilot father. ("All Wisconsin pilots have to be bush pilots," he points out.) Papa Roemer let Peter handle the controls of the family Bonanza, but to keep him on the straight and narrrow and avoid the pitfalls of "the old ways," Peter was sent to a regular flight school to get his license at 16. He hewed the line until about three years ago when, like pool in River City, Peter learned about soaring. ". . . I think I made a wrong turn on the freeway," he writes. "I ran into an astonishing collection of decadent soaring bums, lost souls, and sundry strange and wonderful characters. I've been trying ever since to find my way back to the real world."

Along the way he became the builder, owner, and pilot of *Monerai* Seven Papa Romeo. ("Lately," he says, "I've spent a great deal of time fending off smart comments about my call sign.") During landings, Peter finds the ship's pitch response too sensitive for his liking, so he is currently designing a tee tail to replace the vee. (Roemer holds a degree in physics from Carnegie Tech.) Nevertheless, one of his landings at this year's Taos Soaring Festival was evidently highly regarded. He had spent over four hours disporting himself at altitudes up to 19,000 feet above the mountains. Intrigued by a growing cu nim, he explored its periphery unaware, evidently, that it was moving out over the valley (and gliderport) until a friend radioed from the field to say the thunderhead's storm was expected to arrive soon. "I got back about 10 minutes before maximum disruption, but even then Taos ground was saying something like 'Gusts at 50 knots — *from all directions!*' The turbulence was worse than rotors at Black Forest." (He goes there 3 or 4 times a year.)

He didn't think much of his landing: "I tried to carry extra airspeed, but the best I could do was keep the needle swinging between 80 and 100 knots. *Monerai* crosswind landings are difficult and the wind was coming from every which way, so I decided to use my ground-loop inhibiting technique." He evidently heads off incipient ground loops by dropping the opposing wingtip. "It can scratch the wingtip or wheel — but it works!" he said happily.

Allowances should be made for Peter's penchant for self-denigration. The landing was probably a virtuoso performance. At any rate, he was given the Brandes Memorial Trophy for the Festival's most outstanding flight. He professes puzzlement at the award's rationale. "Unfortunately," he concludes enigmatically, "details about the award have been particulary hard to ascertain due to the condition of the people attending the ceremony."



A NOTE FROM THE SECRETARY

This column has been introduced to inform members about decisions and discussions at Executive meetings. Rather than publish the formal minutes of such meetings (which can be a waste of space in an August Journal such as this), I will present a summary of the outcomes of such meetings. Any club member who would like to know more about any particular matter should contact me. The minutes of the meetings are kept by myself and are open t inspection by any member of the club by prior arrangement with me.

D. Medlow
Secretary

Meeting 1 : 19th May 1982

General discussion of the current problems facing the club : winch, Barry Falke C of A, airfield, club house, radios etc. This was the first meeting of the first meeting of the newly elected (and confirme elected by S.G.M.) executive.

Meeting 2 : 26th May 1982

The setting up of the club calendar was discussed and the committee resolved that the President and Secretary proceed with plans to organ this. Together with this, the Executive asked Andrew Sawyer and Dene Lorwood to prepare a club promotion package for review at a later date. Also discussed was the publication of the newsletter and it was decided that the newletter would be published every month and that copy deadlines for each issue would be the Executive meeting one week immediately before the general meeting each month. Dene Lorwood was appointed Newsletter editor and co-opted onto the Executive for this purpose. It was also decided to send a letter to C.F.A. requesting approval of the club's various modifications to it's aircraft.

Meeting 3 : 3rd July 1982

The Executive decided to re-register the newletter with Australia Post at a cost of $20, and changed the name of the publication to 'Uni Gliding'. Aircraft repairs were discussed and various tasks delegated

TABLE OF EXECUTIVE MOTIONS

(Each motion is denoted by the symbols nn-mm/82 where nn is the resolution number, mm is the meeting number).

1-2/82	Setting up of club calendar
2-2/82	Promotions package
3-2/82	Confirmation of minutes of meeting 1.
4-2/82	Bank a/c signatories (all Executive members are signitories on the club a/cs)
5-2/82	Newsletter publishing arrangements
6-2/82	Letter to GFA re aircraft modifications.
1-3/82	Confirmation of minutes of meeting 2.
2-3/82	Re-registration of newsletter.
3-3/82	Name of newsletter.

N.B. The Executive met on 27th July, details will be published in the next newsletter.

CLUB ACCIDENT RATES

It is sad to note that Bob MacDonald (one of the farmers that let us use the land as our airfield) has had an accident when his motorbike tried to tangle with something bigger. We are told that he was not too badly hurt.

Also, people should stop knocking the winch, especially with Bellettes! It must be noted though that the winch came off the victor in the engagement (seriously though, with all the field to run over, how come the winch gets singled out?)

It just goes to show that people must not drive/fly vehicles or gliders anywhere near the winch?

CHEAP & NASTY ADDITIONS

(Not associated with A.V. JENNINGS HOME IMPROVEMENTS - have you seen their prices?)

The injured party was Bob Giles (not Bob McDonald).

Bob collided with a larger vehicle than his motorbike when the other vehicle decided to do a U-turn in front of Bob rather suddenly. Though Bob's left leg is in plaster and he's off work it hasn't stopped him from putting in a great deal of work on the Bergfalke during the daytime.

Next month:

Phantom might actually return - negotiations are in progress!! While the Phantom is eager to return we are negotiating with our readers in an attempt to convince them that he should return.

Cheap & nasty additions courtesy of the Adelaide University Students Association

Adelaide University Gliding Club

Usage of Radio

At present, the AUGC operates radios in the 27 MHz band only, so there i possibility of communicating with other aircraft (unless they happen to ha similar equipment - most unlikely) or aeronautical land stations. Therefo these notes are confined to sections that are relevant to present club operations only, with view to expansion in the future.

The procedures outlined below apply to most, if not all, radio communi-cations equipment, and you should be thoroughly familiar with them before attempt to operate the equipment. If in doubt, ask somebody!

If you have further interest in this area, or you intend to fly gliders other clubs (which are equipped with VHF band radios normally), you will n to attend a radio procedures course given by the club, or from time to tim GFA/SAGA. Approach any instructor for details.

Starting Up

1. Make sure ON/OFF switch is in the OFF position.

2. Connect battery (charged!), check microphone and antenna leads are connected. For the base set, ensure that the magnetic antenna base is firmly attached to a metal surface (otherwise the radio will be damaged).

3. Power ON. If nothing happens (eg channel display does not light up) TURN OFF IMMEDIATELY and get help.

4. Adjust controls:

channel	select (usually 1 or 2, but all sets to agree)
volume	2/3 up initially
RF gain	if fitted, 2/3 up
squelch	(or mute) reduce until noise continuous adjust volume to comfortable level increase squelch to JUST STOP the noise

   (on some sets there is also a control marked 'CAL' - this should be about 2/3 on normally. Don't fiddle with it.)

5. Make test transmission from each set before starting operations.

Using the Radio

1. Adjust controls as outlined above.
2. Pick up the microphone. WAIT for other transmissions to cease, also for any replies that they may be expecting.
3. THINK about what you are going to say - exactly - brief and to the point; is it necessary?
4. Hold microphone close to mouth, correct side facing you - press transmit key - wait for 1 second, then speak clearly and slightly slower than normal, softer and slightly higher pitch than normal conversation. Do not shout - they will not understand you.
5. Release transmit key when you have finished.
6. Replace microphone - do not leave it dangling by its cord.

Notes:

1. If you are not getting through, there may be several reasons (aside from flat batteries and so on). If you are still within range, you may simply not be hearing the reply, if your set is not adjusted properly. At extreme ranges, you will need to reduce the squelch, almost totally, and put up with the noise. Increasing the RF gain may help, but it will also increase unwanted interference from other stations.

2. Don't forget that the person you are trying to call may have the same problem, or else he simply is not listening. Keep trying at intervals, but not continuously.

3. On a longer flight, it is a good idea to arrange for specific times at which you try to establish contact (say on the half-hour) and report your progress. If both sets are adjusted properly, and somebody is listening, you will probably get through. Don't forget in some cases an airborne radio may have a greater range than on the ground, so get another glider to relay, if possible.

4. If it looks like you might outland, report early and while you still have enough height for good range. Do not leave it until the last minute - you should be concentrating on flying. Always confirm outlanding reports by telephone after you land - it is too easy to get the position wrong, and waste time looking needlessly.

5. FLY the aircraft FIRST. Don't ever neglect your flying to say something on the radio - it can always wait. If you are busy, concentrate on what you are doing; if you have time, "STAND BY" is a useful reply.

RADIOTELEPHONY PHONETIC ALPHABET

Letter	Word	Spoken as
A	Alfa	AL FAH
B	Bravo	BRAH VOH
C	Charlie	CHAR LEE
D	Delta	DELL TAH
E	Echo	ECK OH
F	Foxtrot	FOKS TROT
G	Golf	GOLF
H	Hotel	HOH TELL
I	India	IN DEE AH
J	Juliett	JEW LEE ETT
K	Kilo	KEY LOH
L	Lima	LEE MAH
M	Mike	MIKE
N	November	NO VEM BER
O	Oscar	OSS CAH
P	Papa	PAH PAH
Q	Quebec	KEH BECK
R	Romeo	ROW ME OH
S	Sierra	SEE AIRRAH
T	Tango	TANG GO
U	Uniform	YOU NEE FORM
V	Victor	VIK TAH
W	Whiskey	WISS KEY
X	X-Ray	ECKS RAY
Y	Yankee	YANG KEE
Z	Zulu	ZOO LOO

NOTE—Emphasis should be given to the syllables underlined.

STANDARD READABILITY SCALE (RADIOTELEPHONY)

In response to the query 'How do you read?' one of the following replies in accordance with the readability of the received signal should be made:

'Reading you one' (Your signals are unreadable)
' " " two' (Your signals are readable now and then)
' " " three' (Your signals are readable but with difficulty)
' " " four' (Your signals are readable)
' " " five' (Your signals are perfectly readable)

NOTE—An indication of signal strength is not required.

6 — UNAUTHORISED TRANSMISSIONS

The transmission from an aircraft of signals which are classified hereunder is strictly prohibited:

(*a*) Signals containing profane or obscene language.

(*b*) Signals involving the improper transmission of the call sign of another station.

(*c*) Signals of a private nature.

(*d*) Signals of a deceptive or false nature.

(*e*) Signals not appertaining to operational requirements.

8 — CALL AND REPLY PROCEDURES

8.1 — In establishing initial communication the calling station uses the identification of the station being called once followed by 'THIS IS' and its own identification once. When communication conditions are poor this sequence may be repeated as many times as may be considered necessary.

Examples—'TOWNSVILLE TOWER THIS IS ROMEO MIKE ALPHA'.
'CEDUNA THIS IS GOLF TANGO INDIA'

8.2 — In reply to a call, the station called uses the identification of the calling station once, followed by 'THIS IS', and its own identification once.

Example—'ECHO WHISKEY BRAVO THIS IS CHARLEVILLE'.

8.3 — After initial contact has been established and there is no danger of the aircraft's identification being confused, continuous two-way communication may be permitted by both the aircraft and the ground unit using the aircraft's identification only.

Example—(VH-GZM during approach into Adelaide Airport reports)
'GOLF ZULU MIKE—BASE'.
(Adelaide Tower replies) 'GOLF ZULU MIKE —CLEAR TO LAND'

1 — STANDARD RADIOTELEPHONY PROCEDURAL WORDS AND PHRASES

For radiotelephone communication between aircraft and aeronautical stations the procedural words and phrases listed below are for use in the appropriate circumstances.

Except under communication conditions of high noise level the use of the words 'OVER' and 'OUT' are regarded as being non-mandatory. The word 'ROGER' should not normally be used in acknowledgment of a transmission and the radiotelephony identification of the aircraft should be used by aeronautical and aircraft stations for this purpose.

Words or Phrase	Meaning
ACKNOWLEDGE	'Let me know that you have received and understood my message'
AFFIRMATIVE	'Yes' or 'Permission granted'
*BREAK	'I hereby indicate the separation between portions of the message'. (To be used where there is no clear distinction between the text and other portions of the message).
CORRECTION	'An error has been made in this transmission (or message indicated). The correct version is . . . . . '
*GO AHEAD	'Proceed with your message'
HOW DO YOU READ?	Self explanatory. (*See* Appendix 5)
I SAY AGAIN	Self explanatory
NEGATIVE	'No' or 'Permission not granted' or 'That is not correct'
*OVER	'My transmission is ended and I expect a response from you'
*OUT	'This conversation is ended and no response is expected'
READ BACK	'Repeat all, or the specified part, of this message back to me exactly as received'
ROGER	'I have received all of your last transmission'
SAY AGAIN	'Repeat all, or the following part, of your last transmission'
SPEAK SLOWER	Self explanatory
STANDBY	Self explanatory
THAT IS CORRECT	Self explanatory
VERIFY	'Check coding, check text with the originator and send correct version'
WILCO	'Your last message (or message indicated) received, understood, and will be complied with
*WORDS TWICE	(*a*) **As a request:** 'Communication is difficult. Please send every word twice'
	(*b*) **As information:** 'Since communication is difficult, every word in this message will be sent twice'

* Words and phrases marked with an asterisk should be used only under difficult communications conditions

2 — RADIOTELEPHONY TRANSMISSION OF NUMERALS

2.1 — Numbers shall be spoken using the following method of pronouncing the individual numerals:

0 — ZE-RO
1 — WUN
2 — TOO
3 — TREE (or THREE)
4 — FOW-er
5 — FIFE
6 — SIX
7 — SEV-en
8 — AIT
9 — NIN-er

NOTE—The syllables printed in capital letters are to be stressed. For example, the two syllables in ZE-RO are given equal emphasis, whereas the first syllable of FOW-er is given primary emphasis.

2.2 — All numbers except whole thousands shall be transmitted by pronouncing each digit separately. When used, the word 'thousand' shall be pronounced 'TOUSAND'.

Examples:

Number	Spoken as
10	WUN ZE-RO
75	SEV-en FIFE
500	FIFE ZE-RO ZE-RO
4872	FOW-er AIT SEV-en TOO
10000	WUN ZE-RO TOU-SAND
26089	TOO SIX ZE-RO AIT NIN-er

2.3 — Where numbers include a decimal point, the number should be spoken as prescribed above with the 'point' being spoken as the word 'DAY-SEE-MAL'.

Example:

Number	Spoken as
118.1	WUN WUN AIT DAY-SEE-MAL WUN
119.7	WUN WUN NIN-er DAY-SEE-MAL SEV-en

2.4 — When transmitting 'eighths' of cloud in meteorological messages over voice channels the word OKTAS shall be used, e.g. ⅜ shall be spoken as SEV-en OCK-TAS.