Silver Lining

Fall 2005
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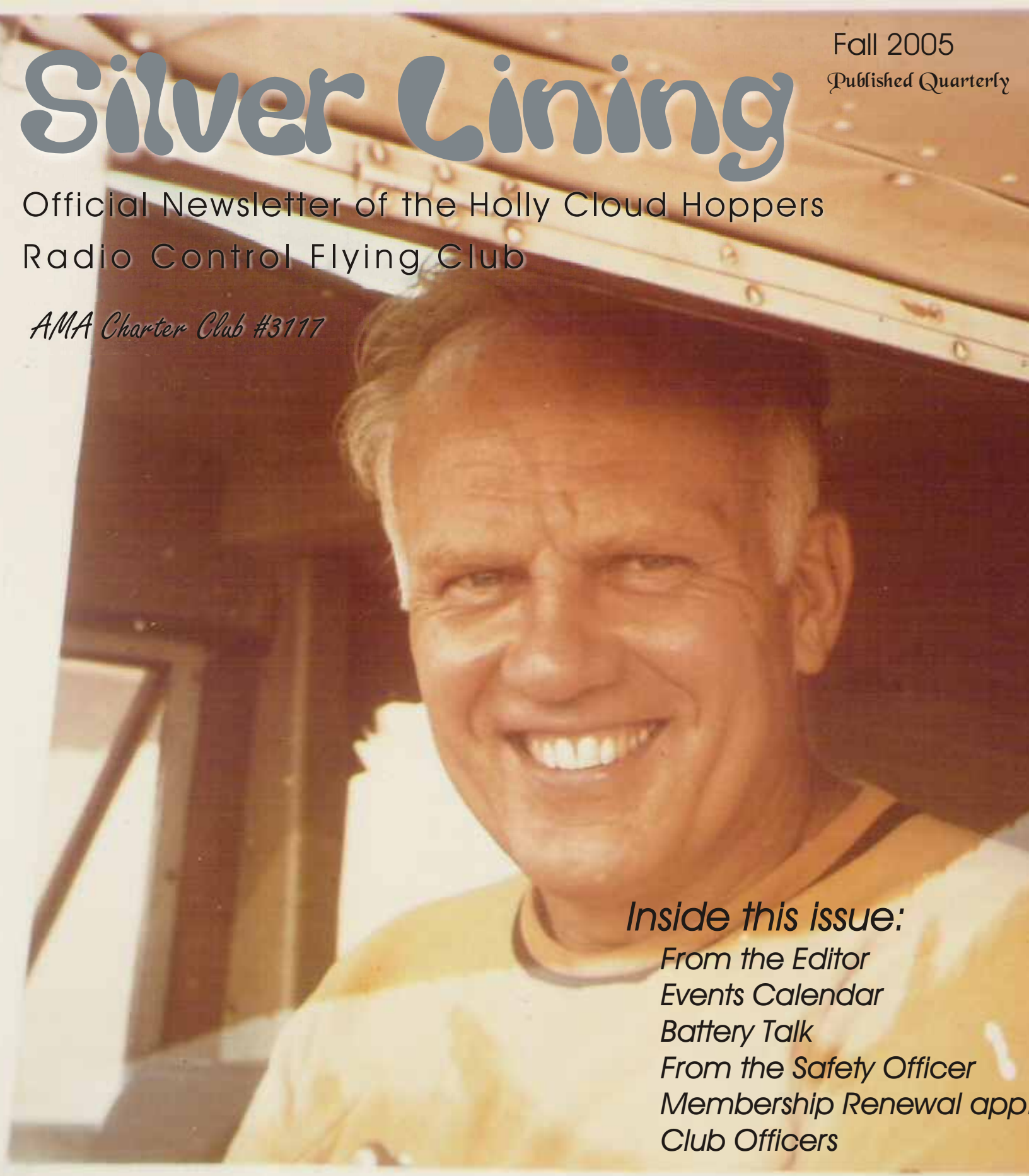
Official Newsletter of the Holly Cloud Hoppers
Radio Control Flying Club

AMA Charter Club #3117



Inside this issue:

www.hollycloudhoppers.org

Be Safe, Have Fun and Don't Have Too Many Rules!

From the Editor

Scott Rhoades

For the second time in very short period, I must announce the passing of a *HCH* member. On September 22, 2005 Joe Lehman passed away. This is a difficult process writing about a person that I got to know well beyond a common interest in R/C, and then having to edit those thoughts to newsletter editorial column length.

At the time of Joe's passing, this issue was about 50% complete. So without giving it much thought a couple things that were considered complete, were changed in order to tribute a person that many members considered a good friend. The biggest change was the cover photo gracing this issue. When Joe's family let me borrow that particular picture my intention was to place it among some other photos of Joe. After that picture was loaded into my computer I spent quite a bit of time moving it around to different locations, trying to create the best layout. Joe's grin was becoming very infectious and I couldn't help but smile back, so in a whimsical moment I decided to see what that smile would look like on the cover. In my opinion, ole' Joe looks pretty darn good as the first ever cover model of the Silver Lining. It's not Plane and Pilot or Flying magazine but I hope he would approve.

If you did not know Joe, then you were not around when he made an appearance at the field. Joe's arrival was very reminiscent of the 80's television sitcom Cheers. Just like Cheers character Norm, everybody said hello to Joe while he made is way to a favorite vantage point at one of the picnic tables. Like Norm, Joe would then dispense clever wit and jest in between socializing.

Joe had a great sense of humor; I can't tell you how many times I listened to him tell what I thought was a personal story that actually was a well-crafted joke. Joe's sense of humor was obvious and ever enduring, but what many people did not realize is that he was actually rather modest. What made Joe modest is that many did not know he was truly multi-talented and well read. Joe was never boastful of his skills, but one visit to his workshop and seeing products of his effort spoke volumes of his outstanding abilities as a machinist, woodworker and engineer, just to name a few skills.

As for the subject of airplanes, Joe was extremely knowledgeable. If you look closely at the cover photo you will notice he was a full-scale pilot too. His vast knowledge on many subjects was dispersed in small, low-key doses. If you had not known him for a long time it was easy to believe any information Joe shared was just from a casual interest in the subject. I'm willing to bet if you did know the facts about Joe, you first learned of it from others that talked of his considerable knowledge and talents.

Joe's contribution to the club was not always visible but was often vital; many times he helped fix machinery and even crafted parts for the mower(s) that saved the club a lot of money. Joe's good-humored nature was an important element to the friendly atmosphere of the club as well. When a meeting was getting too intense or when somebody wrecked a plane, Joe's well-timed addition of one-liners eased tensions and made people remember this is supposed to be for fun. Also, thanks to Joe, the club actually had a positive cash flow at the last two *HCH* open houses. Joe donated complete, ready to fly airplanes that were raffled during those open houses.

What I liked most about Joe is that he always took the time to talk at length to my kids. Often I saw him asking the kids about their school and teachers along with other interest they had. Many times he passed on some sort of obscure but interesting trivia. I could go on several paragraphs, and pretty much did prior to editing, talking about Joe's amiable personality, things he designed and made, funny stories or even elaborate practical jokes he pulled off. I'm sure I've said much more than he would have preferred. I can hear Joe right now, "It's the Cloud Hopper newsletter, not the Joe Lehman newsletter". Even though I'm going to miss this gentleman, I consider myself extremely lucky for having known him.

For *HCH* business, one of the things you will find in this issue is a membership renewal application. Last year Larry and I formulated a renewal application to publish in the newsletter as

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On the Cover:

Joseph Lehman Jr. *1921-2005*

This photo of Joe was taken around 1969. Ready for take off in his Luscombe.

Photo provided by the Lehman family

Photo by Jeff Lambert

Events Calendar

November 2005

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December 2005

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

HCH dates

Events around the area

Midwest R/C Swap Meet	303 West Main st Northville	9:00 am	November 13 th
Rib Crackers Swap Meet	Livonia Senior Ce ter, 5 mile and Farmington		December 4th
Chilli Fun Fly	*HCH* Club Field	11:00 am	January 1st (2006)
Chesaning R/C swap meet	Baker College, Owosso	9:00 am	February 5h
Annul Club Meeting	Holly VFW post, 201 Airport Rd.	2:00 pm	February 26th
2006 *HCH* Membership dues due			March 1ST
Toledo R/C Exposition	Seagate Center, Toledo OH		April 7,8,9

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a pilot program (no pun intended). When it came time to deciding whether or not to publish it again, Larry said several members used the renewal application last year and it does make his job easier. So, please use that application to renew your membership. Even if you plan on renewing at the annual meeting, bring it completed. The many of you reading this on-line will notice that I kept the application page to just plain ole' black and white, no flashy colors to keep printing as economical a possible on ink. If you're unsure how to print just that page without wasting ink on the other seven high color pages, give me a call and I'll help you through the process. (See club officer section for my phone number).

Since this is the last newsletter of the year, this will be the only chance to publish information about the annual meeting. As it stands right now, we once again have use of the Holly VFW hall and our meeting will be February 26 @ 2:00pm. Be sure to put this on your calendar and bring your winter projects for the winter project contest.

Don Campbell Memorial Fly-In August 7th 2005

Phot credits: Shirly Campbell
Don Kaliquin
JohnVerran

Battery Talk

By Scott Rhoades

Now that another flying season is behind us, this is an excellent time to evaluate those Nickel Cadmium (NiCd) and/or Nickel Metal Hydride (NiMH) transmitter and receiver batteries. Examining those packs now will allow you plenty of time to replace anything questionable well before the next flying season arrives.

One evaluation point is age. Most modeler's document the day a particular pack was purchased and put into service; maybe this is what you do. But do you know how long the cells sat in storage before they were made into a pack and sold to you? Sanyo, one of the most popular manufacturers of NiCd and NiMH cells, prints a two-letter date code on the jacket of every cell indicating when it was produced. Very likely, the outer sleeve encasing an entire pack of cells will obscure your view of this code. If you are so inclined to see how old your cells really are, replacement sleeves are available at most hobby shops and are easy to apply with a heat gun.

Sanyo date codes work like this:
The first letter equals the year. The second letter equals the month.

Example: 'HK' would be 2003, November.

Year	/	Month
A =1996		A = JANUARY
B = 1997		B = FEBRUARY
C = 1998		C = MARCH
D = 1999		D = APRIL
E = 2000		E = MAY
F = 2001		F = JUNE
G = 2002		G = JULY
H = 2003		H = AUGUST
I = 2004		I = SEPTEMBER
J = 2005		J = OCTOBER
K = 2006		K= NOVEMBER
L = 2007		L = DECEMBER
M = 2008		

** Keep in mind that year codes rolled over in 1996 to start at the top of the alphabet again.*

Some of you may be wondering about cells that are completely void of any markings whatsoever? Well, these are what the industry calls re-jacketed cells. As I understand it, these cells have a dubious past or origin.

The magic question now is, "How old is too old?" How long NiCD and NiMH cells remain suitable for aeromedeling has been debated since modelers started using them. Many modelers strictly adhere to a two-year replacement schedule. Others may consider that too quick of a replacement and a waste of precious modeling funds. Regardless of your perspective, it is universally understood that a modeler is pushing his/her luck flying with cells that have reached their fourth birthday. How long cells remain "R/C" usable depends on what type of life they had. A battery's life span can severely be shortened if it was involved in a bad crash, exposed to excessive vibration or overcharged.

Nickel Cadmium and Nickel Metal Hydride are toxic chemicals that should not go into a landfill. Cells removed from active duty should be recycled instead of thrown into the trash. Most retailers that sell cordless tools, such as a hardware store, participate in a battery-recycling program. They will gladly take your old cells.

Age is just one small factor determining if batteries are ready for retirement because rare cells have been known to call it quits within just one year of being manufactured. That's why a modeler should constantly monitor pack capacity and cycling is the means to that information. For those not familiar with battery cycling, simply put, it's the process in which a fully charged pack is discharged while

▲ The cell on the left has the date code GB (2002, February) The pack on the right are "re-jacketed" cells. No surprise, those cells gave up a long time ago, now they wait to be recycled.

Batteries: ◄ 5

the milliamp hour (mAh) is measured. Once a battery pack's mAh capacity is measured, that number is compared to the rated capacity of the pack (which is printed right on the cell(s) and most often on the outer sleeve by the pack maker). New packs often measure more than the rated capacity. However, once a pack fails to cycle at 80% of the rated capacity, it should be retired from controlling an R/C model… Period! Cycling a battery pack is accomplished by one of the many battery cycling/charging units available on the market today.

So, you determine your battery collection is of an acceptable age and they cycle at a capacity well above 80%. For this, you decide to keep most, if not all, of your packs for the next flying season, so how should they be stored? According to battery guru Red Scholefield, batteries ideally should be stored in a discharged state of 1.1 volts per cell (4.4v for receiver and 8.8v for transmitter). The very sound reasoning given by Red is good cells will simply remain unharmed in this discharged condition. A bad cell, on the other hand, is more likely to short. This is a good thing! It's better to discover you have a bad cell while its in storage than during a flight. He also suggests removing packs, or simply disconnecting them from the transmitter and/or receiver, for some very good reasons that would take several sentences of plagiarism to explain. However, I will tell you, the major reason is called black wire disease that can spread to your expensive radio gear.

There is certainly A LOT more information available about this subject and I vastly paraphrased Mr. Scholefield. So, I highly recommend visiting his website, ***www.rcbatteryclinic.com*** to learn more. Also, be sure to read Red's bi-monthly column in ModelAviation.

HCH 2006 MEMBERSHIP RENEWAL APPLICATION

Print this application and send along with your check to renew you HCH membership.

Due by March 1, 2006

** Required*

*Name _____ *AMA # _____ *Email _____

Family membership additions (must also be AMA).

Name _____ AMA # _____ Email _____

Name _____ AMA # _____ Email _____

Name _____ AMA # _____ Email _____

*All radio equipment that I use is on the following channels: _____

***I will be renewing as:**

☐ Full Member $35.00

☐ Family Membership $45.00

☐ Associate member (AMA not required) $25.00

Membership Amount $ _____

*2006 Michigan State Park Vehicle Pass . . . . . **+24.00**
(One pass covers an entire family membership)

☐ *I'm over 65 and will purchase my discount pass from the DNR.*

***Total Check Amount** $ _____

Make your check or money order payable to:
Holly Cloud Hoppers

Mail to**: Larry Pittman**
11406 Majorca Pl.
Fenton, MI 48530

Renewals after April 15, must include a $15.00 reinstatement fee

If your AMA membership was renewed after January 1, please provide a photo copy of your 2006 AMA membership card to expedite your HCH renewal.

☐ My address and/or phone number has changed.

New Address: _____

_____

New Phone: _____

From the Safety Officer

Frank Robinson With Scott Rhoades

How many of you are using, or thinking about getting, one of R/C's latest gadgets… a synthesized transmitter? Many radio makers now have synthesized systems and even though they may make use of different know how; they all accomplish the same mission… Provide the user the ability to transmit on any 72 MHz channel. Being able to quickly change to any one of the 50 aircraft channels is a nice convenience but there are risks involved, and big ones too. It wasn't until recently that I fully understood why some individuals on R/C Internet news groups have dubbed synthesized transmitters "Dial-A-Crash". I almost made it a personal reality with my own brand new Hitec Optic 6 with the Spectra Synthesized Module installed.

Initially, I programmed two models into the Optic 6's multi-model memory. At the time I also decided to make good use of the Spectra's features by choosing planes with different receiver channels, 19 and 56. For a few months I used the Optic 6 just a few times to fly only one of the planes. When I wanted to fly the other plane choosing model #2 from the multi-model memory was rather easy.

At the field, ready to fly plane #2 a quick check of the transmitter's display screen showed the name of plane along with the correct channel of its receiver. So I took pin 56 from the frequency control board and went to do a pre-flight. When the transmitter and receiver were both on, no controls on the plane responded at all. I didn't know what was wrong so everything was turned off while I thought about possible issues…

I should take time to explain how channel changes are done with the Hitec system for those not familiar with it. The Spectra is an RF module, roughly half the size a pack of cigarettes, which plugs into the back of the transmitter. On that module are two dials, one for each digit of the channel; a plastic screwdriver, supplied by Hitec, is used to adjust them. Since the dials are located on the side of the module, it must be completely removed from the transmitter to select a different channel. Accidentally changing channels is, as far as I can tell, is impossible with this set up.

Back to my story, and you may have already guessed the problem was I had forgotten to change the module from channel 19 for airplane #1. But some of you may be wondering, like I had at the moment, "What about the 56 that came up on the display?" Wasn't that an indicator showing what channel the Spectra module is set to? No! To my disappointment, I learned the display screen never indicates what channel the module it is set to. The ONLY way to determine the channel on which you will be broadcasting is removing the module and looking at the dials. Basically, I had forgotten I had done as suggested in the manual, and put the "56" in during programming, only as a reminder to the channel of the receiver in that plane.

Boy, I was very lucky somebody wasn't flying on channel 19 at the time. It worries me how simple it is to make that mistake and how similar slip-ups could easily happen to anyone using one of these gizmos. Being able to quickly change the transmitter channel is a nice feature and the Hitec system works as well as advertised. Regardless of what manufacturer's system you use, I cannot stress enough how much care must be taken to make sure you know exactly what channel your transmitter is set to, before you ever think about turning on the power. If you use a synthesized transmitter and you are not extra careful, make sure you have plenty of spare cash to buy some busted up airplanes.

Scott Rhoades: I too have Hitec's Spectra Module in my Eclipse 7 and have been using it for three flying seasons now. Fortunately, have not had an incident like Frank's (knock on wood). I did, however, take a drastic measure to greatly minimize the possibility. As Frank said, the Spectra's dials are on the side of the module and not in view when the module is installed. One of the first things I did, which probably voided the transmitter's warranty, was cut a hole in the case. Now I can see the Spectra's dials with a quick glance. I also developed a habit of looking at the dial settings before I pull a pin from the frequency control board.

▲ **An arrow points to a hole cut into the case of an Eclipse 7's case, that allows easy access to the Spectra module dials.**

It's important to note that the Hitec system DOES broadcast whenever the power is on; regardless of any programming modes it may be in. If you're unsure whether this is true or not with other systems, it is **best to assume if it's on, it's broadcasting.**

► **Synthesized, 8**

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Synthesized: ◄ 7

From my limited research into other brands of synthesized transmitters, I found several of those systems also accomplish channel changes manually with dials. There are a couple systems, however, where channel changes are done electronically through programming the transmitter's computer. Even though some systems appear more foolproof than others, a synthesized system requires the user to be very conscious of frequency management. Polk's Tracker Series, for example, has a built-in scanner that will not allow the user to select or broadcast on a busy channel. As wonderful as this may sound, it does not lessen the need for extra user responsibility. A flyer still needs to know his/her frequency and make sure it's reserved, because no system is protected from being shot down…yet.

Frequency Distribution