by Kevin Funk



column first appeared in Sport Rocketry several readers have written in expressing concern that I'm not presenting the proper image of our hobby to the general public. I'm not exactly sure what image they're referring to, but it's obvious these people don't have cable TV. Since they don't, I'll share with them some of the samples of abuse rocketry takes at the hands of Hollywood film makers. Rocketry's nemesis is really the silver screen, not the printed word.

The most infamous case of Holly-wood's abuse of rocketry revolved around an episode of ABC's ThirtySomething (currently in re-runs on Lifetime). A young boy and his grandfather were going to launch a model rocket and somehow, against all logic, it exploded and severely injured them both. When confronted by the NAR, ThirtySomething producers fell back on the "dramatic license" argument and that was the end of it. I'd say those writers should have had their dramatic licenses revoked for WUI (Writing Under the Influence).

The ThirtySomething episode is similar to a scene from the '70s TV series about paramedics, Emergency (currently in re-runs on TBS), in which another boy and his grandfather were injured by a Saturn V—using liquid rocket fuel! The series, produced by Jack Webb of Dragnet fame, certainly failed to "get the facts" in that episode.

Rocket purists may want to pause here and consider the implication these two episodes present: Grandfathers + rockets = disaster! If the NAR ever does petition Hollywood to stop abusing rocketry, perhaps the AARP (American Association of Retired Persons) would like to sign on in an effort to stop Hollywood's abuse of grandfathers, too!

Hollywood also likes to use rocketry for simple, comic reflef. ABC's Family Matters (first-run episodes still airing, re-runs in syndication) had the nerd Urkel accidentally launching a Cox Saturn 1B in the living room. The rocket which was clearly attached to a string and didn't really "launch"—made a hole in the ceiling and was never seen again, something we can't say about this episode, which will live on forever in syndication. In this case I agree with the rocket purists who would say this episode simply didn't portray



the truth—any high power flier will tell you that the only likely result of such an accident would be some

burned drapes. And as we all know, nerds know how to launch rockets better than anyone else—just look at the guy standing at the pad next to yours!

Worse than these scenes of disaster are entire films centered around a star's fascination with our hobby and their desire to become one of us. A subplot in the 1989 feature Personal Choice (a perennial favorite on all premium movie channels) has Christian Slater portraying a young man building a scratch-built Saturn V. Not only was the Saturn just a kit, it was obvious that Slater had the equivalent of a stunt double-a scratch double-building the rocket for him. A close-up of the actor's hands revealed no hobby knife nicks or cuts, no spray adhesive residue, or even a hint of the common super glue "scab." Slater, like many others before him, learned that in this hobby good looks and a full head of hair aren't nearly as important as the ability to see yourself bleed and to sleep soundly in a room filled with glue and paint fumes.

Speaking of good looks, the 1992 film, Hard Hunted (seen regularly on Cinemax and The Movie Channel "Drive In" shows), starred two former Playboy Playmates as secret agents with Estes Alpha kits in their arsenal. The Alphas were mounted horizontally on launch rods atop the skids of model R/C helicopters and fired as either air-to-air or air-to-ground missiles. Although I wasn't paying particular attention to these ladies' hands, it's safe to say that they didn't spend much time working on either the R/C helicopters or the rockets!

So you see, my idle ranting here is innocent fun compared to the false impressions Hollywood is conveying about our hobby. Rocketry's lack of respect from Tinseltown will continue to go unchecked unless we, the hobbyists, take action. The next time you're in a theater and see a harebrained depiction of rocketry, I urge you to boo out loud. If you've rented a video that portrays the unsafe use of rockets, don't rewind the tape before taking it back! And most important of all, slap that Urkel kid silly if you ever meet him on the street—making sure you get his autograph first, of course!

S R

### The Unstable Rocketeer

by Kevin Funk

ome of you already know me through my duties as editor of WARP-9, the official new sletter of San Diego based section, DART. Needless to say, I won't have the same latitude in subject matter here as I would in our own rag, but I'll try to bring the same sense of irreverence to this column that is featured in WARP-9. (And, if that piques your interest, you can get a sample copy of our newsletter by sending \$1.25 to me at: 25944 Kaywood Court, Escondido, CA 92026. Hey, haven't you ever heard of an irreverent huckster?)

Besides being irreverent, I can also be described as crippled, disabled, handicapped, or for the "politically correct", physically challenged! Whatever label you want to use, you can blame my problems on muscular dystrophy, a disease that leaves me as weak as a kitten and, let's face it, just as cute. It's because of my disability that I became involved in sport rocketry and have since found that it's the perfect hobby for people in my position (e.g. sitting in a wheelchair.)

Building the rockets is fun and this is done in a sitting position, Painting and decaling can also be done while seated, although I do occasionally spray paint my shoes.

Ready to launch? Have a seat while you prep the rocket. Getting the rocket on the pad is no problem if you're using an Estes' style pad anything taller and you look sheepishly at a cohort and ask, "Can you do me up?" Be sure to keep that sheepish look handy, because after launch (also performed in a seated position, neat huh?) you'll have to get some lucky stiff to retrieve the rocket. This is perhaps the best part about being a disabled rocketeer - it doesn't matter which way your rod is angled or how windy it is, you're not chasing after your rocket anyway, so just let her rip! You'll no doubt learn colorful new language from your pals as they watch your bird drift over a hill or into a bramble patch or, in DART's case, into the water. And it's great

fun to see them look at you, then the rocket, then back at you again, somehow hoping that between glances you've been cured and you can go after your own damn bird.

Of course, being a disabled rocketeer isn't all fun and games. I do perform many serious functions for our section. During competitions the DART guys disconnect the batteries on my wheelchair and I become the spot for the spot landing contest. "Heads up, Key!" At high power launches, whenever a particularly scary looking bird is placed on the pad. I become the human bunker, with people taking shelter behind me. "Geez, Kev, it's not like you'd be able to get out of the way anyway?" They're right, of course, and it's the least I can do for my fellow fliers. After all, I won't have to chase after my minimum diameter G powered bird that's due up next on the pad, will 1?

In the end, sport rocketry is the great equalizer. No matter how good you are, or how good you think you are, one of your rockets will eventually crash. And just like everybody else, you'll blame the manufacturer for some shortcoming in the product - a worthless attempt to preserve some of your dignity as you scrape your rocket off the pavement.

One of my better known stunts was an attempt to set the world land speed record for wheelchairs. Using a US Rockets Swarm powered by an AeroTech K1100, I was confident of entering the record books in grand style. Unfortunately, I forgot to undo the brakes on the chair so the only thing I ended up entering was a low earth orbit. Lavoided serious injury, if not embarrassment, upon re-entry when my pants blew off, allowing my boxer shorts to billow and catch air like a parachute. I haven't worn those boxers since, for obvious reasons. (And, as the legal department says, "Kids, it's only a joke, don't try this at home.")







by Kevin Funk



Ititude tracking. The "lost art" of the NAR. One of the few areas that wasn't addressed in the recent Pink Book rewrite was a change in the altitude tracking requirements so that altitude events could be just as easy and fun to fly as the more popular duration events. Let's face it, only a handful of people in the hobby can pronounce "theodolite" correctly, let alone use one to successfully track a racket. What's the solution?

Glad you asked!

Introducing the I-BALL tracking system. That's I, as in "eye", and I-BALL stands for Individual Bearing Altitude Language Lexicon. You see, the I-BALL system does away with theodolites and number crunching and relies on the use of everyday language to determine an event winner.

Here's how-

A team of 3 or 5 altitude judges (or AJ's) assemble around the range head during altitude events. Unlike traditional tracking duty, trackers aren't off by themselves bored stiff at their tracking stations and the club doesn't need to invest in expensive communication equipment with the I-BALL system. The AJ's are right there, within speaking distance of the CD, so they can track and prep their own models at the same time.

An altitude entry is launched and the judges watch the flight. At, or near, what they consider to be apogee the judges report their scores to the CD by using one of the five I-BALL scoring terms. From best to worst, they are:

- 1) Whoa!
- 2) "Got me beat!"
- 3) "That's up there, man!"
- 4) Ever heard of tracking powder?
- 5) 7 don't see nothing."

To the uninitiated

these terms may seem just as confusing as azimuth and elevation, but after a brief explanation everyone reading this will be qualified to become an I-BALL tracker.

Whoa! - the ultimate score in I-BALL tracking. Get enough of these and you're on your way to winning the event!

Got Me Beat. – Usually a result from a flight powered by a composite motor. Judges reporting a Got Me Beat score usually do so in a subdued voice and may not be heard by the CD or LCO. A visual check of the judges, however, will almost certainly confirm which one scored the flight with Got Me Beat – it's the first judge to take his eyes off the bird and go back about his business while slowly shaking his head.

That's Up There, Man! — A real high flight that has caused the judge to stagger backwards just to keep his eyes on the rocket. Several That's Up There, Man scores from a team of judges will always win over one Whoa!

Ever Heard of Tracking Powder? – Bad news. Could mean the judge lost sight of the model at some point during the flight and may not have seen how high it really went.

Don't See Nothing. – The worst score possible. Much the same as a track lost in normal tracking lingo. You don't want to hear this if it was your bird that was just launched! Don't fret though. Even four Ever Heard of Tracking Powder or I Don't See Nothing scores won't offset the score of the one judge who did see ejection. This is another advantage over traditional tracking systems – just because one or more trackers pulls a Mr. Magoo on your flight doesn't mean you're out of contention.

After the judges report their individual results to the CD, the scores will be averaged and the winner of the event will be the one with the most Whoa! and Got Me Beat scores Much of the detailed, boring, scoring stuff still needs to be worked out for the Pink Book lawyers, rules that will probably end up making the I-BALL system just as convoluted as the rest of our beloved rule book. Suffice it to say that the I-BALL system can be easy, quick, and cheap, and will no doubt turn two-day regional meets into relics of the past

All in favor, say I-BALL!

by Kevin Funk



is the season to be jolly, but for most rocket hobbyists it's the time of year to

prepare for the inevitable: having family or friends bestowing on you a rocket you don't really want. In my

case, I always seem to end up with at least one Estes Big Bertha every Christmas. Mind you, there's nothing wrong with the Big Bertha; it's a nice kit and if you're just getting involved in the hobby you'll want to add one to your collection. Given enough time in the hobby, however, you'll develop the same love/hate relationship with it that I have.

The Big Bertha has become the holiday equivalent of the fruit cake. Everybody gets one and it goes in storage to be recycled as a gift again next year. Fruit cakes and the Big Bertha were the inspirations for the crafty salesman that came up with the phrase, "It's the thought that counts."

The people giving you the Bertha are doing their best. They know you love rockets, but that's all they know. And when they go to the hobby shop all they're likely to see



are Estes kits on display - they don't know there are other companies out there. Oh, sure, you could tell everyone a gift certificate to your local hobby shop would be nice, but

they'll counter that request by saying a gift certificate is "too mercenary" or "too impersonal." (Usually what they really mean is that they can probably find a Big Bertha in the bargain bin for under ten bucks and it would be "too impersonal" for you to find out what cheapskates they are!)

Of course a really generous soul will throw in a pack of motors to go along with the Big Bertha and the hobby shop clerk will invariably suggest motors that don't match the needs of the rocket – A8-S's, for example.

This year I'll be interested to see if my Big Bertha will be the old yellow version or the new black number. Yellow either means "bargain bin" or that the Bertha was bought at a store that doesn't do much volume in the rocket department. Proof of this will be apparent if I receive a pack of aged A8-0's to go along with the kit!

The worst part of the holiday rocket roulette is that you don't want to hurt anyone's feelings when you receive a kit that doesn't meet your fancy. To avoid this, you should spend countless hours in front of the mirror feigning surprise and bellowing, "Ho! Ho! A Big Bertha! How about that!?!" or "Wowee! You know, I've got one of these already but this one I'm gonna modify for D motors!" Note: nodding your head vigorously adds believability to the charade.

And try to put the offending kit aside as soon as it's unwrapped to avoid having to open the bag/box to show the gift giver what a rocket looks like. Feel flattered that they want to learn more about your hobby, but remember that an opened kit is a kit you keep! It can't be recycled next year or donated to a gift drive (in case you're feeling philanthropic). And besides, no matter how much interest your family and friends express

in your rockets, they'll forget everything you tell them and next Christmas they'll be back at the hobby shop scratching their heads as they I look over the selection of kits.



by Kevin Funk



t-i-quette n. The practices and forms prescribed by social convention or by authority.

Ours is a hobby burdened with rules. Some are prescribed by the national rocketry organizations themselves while others are handed down from federal, state, and local government agencies. Most of us heed the rules because violating them may put us in serious trouble. Yet, sometimes, I wish we rocket types would pay more attention to another set of rules - the rules of social etiquette. I'm not talking about things like keeping your pinky finger extended as you sip a cup of tea or knowing the right side of your plate for the salad fork; I'm talking about rules of etiquette directly related to our hobby. Never heard of such things? It doesn't surprise me. Let me fill you in. then, on a few of the finer points of rocketry etiquette.

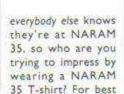
#### **Finger Pointing**

Everyone likes to be acknowledged for the finish on their rocket or after a particularly nice flight, but the same can't be said for their social gaffes. For example, if you're on the competition range and a fellow contestant experiences an accidental emission of intestinal gas, he won't appreciate it if you point and yell, "Thermal!"

Likewise, if you're on the sport range and the fellow crouched at the adjacent pad is losing his pants – allowing an ample view of posterior cleavage – it's generally frowned upon to announce the event to the crowd by pointing and yelling, "Rear ejection on pad six!"

#### Fashion

If you're attending a major rocketry launch or contest, chances are there will be hats and T-shirts for sale commemorating the event. It's fun to buy these items for use at a later date, but it's gauche to wear commemorative apparel during the event at which they were purchased. Let's say you attended NARAM 35. You know you're at NARAM 35.



effect, wear the shirt back at home to impress your buddies (and, of course, wear it again at a future NARAM so people will know that you're somebody).

#### Dining

During a long launch day, people generally wolf down their food and drink so as to not miss flying time. Not only is this unhealthy, it can lead to a serious case of indigestion and gas. You may think you're quite the jester as you give your countdown in a series of belches and burps, but most folks will be unamused. (Personally, I'd be laughing like crazy, but that's why I'm the Unstable Rocketeer.)

On the other hand, if you've attended a banquet at a rocket related event and a belch escapes from you, don't be surprised to hear a chorus of belches in return. This is a common form of bonding between rocketeers, one that signals you are not alone in your assessment of the turkey loaf entree.

#### **Ladies First**

The women's movement hasn't confused the roles of men and women in the sport rocketry hobby. Men are still gallant enough to adhere to the "ladies first" credo on launch day. How it warms my heart to see a burly man set up his pad and launcher only to step aside so that the lady in his life may have the honor of the day's first launch. In appreciation, she affectionately cups his face in her hands, and he slips a small piece of sandpaper into them and whispers, "That launch rod's gonna need a little clean-up, Doll." Who said chivalry is dead?

These are just a few of the more important social guidelines relating to our hobby. Learn them, live them, and you'll be well on your way to becoming a rocketeer your club will be proud to take anywhere!

by Kevin Funk



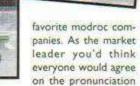
ocketeers are generally an easy group of people to get along with, It's amaz-

ing how much time rocket hobbyists can spend talking about nothing but rockets! Most of us just shoot the breeze, but the hard core aficionados will debate for hours the tiniest details of an obscure rocket design or the merits of proposed NAR bylaw revisions. It wouldn't surprise me if talking about rockets actually surpasses building rockets as a favorite past time for many involved in the hobby. And yet, for all of our talking, we have never taken the time to hammer out a common language that we can all agree on.

For example, how do you pronounce "NARAM"? Do you rhyme the "NAR" with "car" or "care"? Is it "NAR-AM" or "NAIR-AM"? Does anyone really know? And does anyone know how the corresponding numbers relate to the year in which the NARAM took place? What year did NARAM 24 take place? If you took more than a nano-second to answer, you proved my point. The solution to all this is to scrap the NARAM name and replace it with "The Meet." Drop the numbering system and identify The Meet by tacking on the year in which it was held. Thus "NARAM 36" becomes "The Meet '94," Easy to remember, easy to pronounce and one more barrier separating the NAR elite from the uninitiated comes tumbling down.

Everyone knows a motor cato (catastrophic failure) when they see one, but not everyone agrees on how to pronounce it. It's usually pronounced either "Kate-toe" or "Cat-toe." In the interest of linguistic harmony I contacted Tripoli's new chief of Standards and Testing, John Cato (yup, that's his real name), and asked him how his family's surname is pronounced. John says the family elders long ago settled on "Kate-toe." Nevertheless, it would still be better to eliminate the confusing term "cato" entirely and replace it with "pooh" since that is the most common phrase (or variant thereof) heard after a cato. Be prepared to fend off the lawyers from Disney who will probably see this as trademark infringement on the Winniethe-Pooh name.

Now let's leave the NAR behind (hold your applause) and address the confusion encountered when saying the names of our



of "Estes," but it seems to vary between "Estease" and "Es-tess." I tried to go directly to the source and speak with the founder of Estes Industries, Vern Estes, but Vern is a busy man and I wasn't able to get in touch with him before this column went to press. All is not lost, however, because the secretary answering the phone at Vern's office pronounced his last name as "Estess" and that's good enough for me.

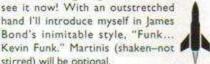
Have you discussed any THOY kits lately? If so did you pronounce it like "Thoy" or like "Toy"? Since I had already run up a huge phone bill calling John Cato and tracking down Vern Estes, I wasn't about to call Michigan and ask THOY owner, Richard Rau, how to pronounce the name of his company, Besides, I wasn't sure how to pronounce "Rau," either, and didn't want to come off as a total fool. The jury is still out on the THOY moniker.

Then there's the case of LOC... Ron Schultz probably thought he was performing a public service by abbreviating his company's name, "Lots Of Crafts" to "LOC," While the abbreviated version is certainly easier to write, I frequently hear the company referred to in conversation as either "Lock" or "El-oh-see" (L-O-C). Again, due to my burgeoning phone bill I couldn't afford to call Ron and ask. What ever happened to toll-free 800 numbers anyway?

The only practical solution to these linguistic mysteries is for the NAR to include an audio cassette in with every mailing to new members. The cassette would feature actor Sean Connery reading aloud a list of NAR terms and modroc company names. As with any language study tape, Connery would pause for a few moments after each phrase allowing the listener to mimic his enunciation and style. Soon we'll all be speaking rocket lingo with the same delightful brogue. Perhaps some of James Bond's (Connery's silver screen alter ego) suave and debonair style will rub off on us, too. We'll learn to introduce ourselves to strangers on the flying field instead of just glaring at them. I can see it now! With an outstretched hand I'll introduce myself in lames

Bond's inimitable style, "Funk...

stirred) will be optional.



by Kevin Funk



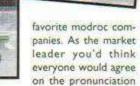
ocketeers are generally an easy group of people to get along with, It's amaz-

ing how much time rocket hobbyists can spend talking about nothing but rockets! Most of us just shoot the breeze, but the hard core aficionados will debate for hours the tiniest details of an obscure rocket design or the merits of proposed NAR bylaw revisions. It wouldn't surprise me if talking about rockets actually surpasses building rockets as a favorite past time for many involved in the hobby. And yet, for all of our talking, we have never taken the time to hammer out a common language that we can all agree on.

For example, how do you pronounce "NARAM"? Do you rhyme the "NAR" with "car" or "care"? Is it "NAR-AM" or "NAIR-AM"? Does anyone really know? And does anyone know how the corresponding numbers relate to the year in which the NARAM took place? What year did NARAM 24 take place? If you took more than a nano-second to answer, you proved my point. The solution to all this is to scrap the NARAM name and replace it with "The Meet." Drop the numbering system and identify The Meet by tacking on the year in which it was held. Thus "NARAM 36" becomes "The Meet '94," Easy to remember, easy to pronounce and one more barrier separating the NAR elite from the uninitiated comes tumbling down.

Everyone knows a motor cato (catastrophic failure) when they see one, but not everyone agrees on how to pronounce it. It's usually pronounced either "Kate-toe" or "Cat-toe." In the interest of linguistic harmony I contacted Tripoli's new chief of Standards and Testing, John Cato (yup, that's his real name), and asked him how his family's surname is pronounced. John says the family elders long ago settled on "Kate-toe." Nevertheless, it would still be better to eliminate the confusing term "cato" entirely and replace it with "pooh" since that is the most common phrase (or variant thereof) heard after a cato. Be prepared to fend off the lawyers from Disney who will probably see this as trademark infringement on the Winniethe-Pooh name.

Now let's leave the NAR behind (hold your applause) and address the confusion encountered when saying the names of our



of "Estes," but it seems to vary between "Estease" and "Es-tess." I tried to go directly to the source and speak with the founder of Estes Industries, Vern Estes, but Vern is a busy man and I wasn't able to get in touch with him before this column went to press. All is not lost, however, because the secretary answering the phone at Vern's office pronounced his last name as "Estess" and that's good enough for me.

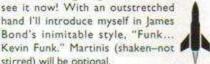
Have you discussed any THOY kits lately? If so did you pronounce it like "Thoy" or like "Toy"? Since I had already run up a huge phone bill calling John Cato and tracking down Vern Estes, I wasn't about to call Michigan and ask THOY owner, Richard Rau, how to pronounce the name of his company, Besides, I wasn't sure how to pronounce "Rau," either, and didn't want to come off as a total fool. The jury is still out on the THOY moniker.

Then there's the case of LOC... Ron Schultz probably thought he was performing a public service by abbreviating his company's name, "Lots Of Crafts" to "LOC," While the abbreviated version is certainly easier to write, I frequently hear the company referred to in conversation as either "Lock" or "El-oh-see" (L-O-C). Again, due to my burgeoning phone bill I couldn't afford to call Ron and ask. What ever happened to toll-free 800 numbers anyway?

The only practical solution to these linguistic mysteries is for the NAR to include an audio cassette in with every mailing to new members. The cassette would feature actor Sean Connery reading aloud a list of NAR terms and modroc company names. As with any language study tape, Connery would pause for a few moments after each phrase allowing the listener to mimic his enunciation and style. Soon we'll all be speaking rocket lingo with the same delightful brogue. Perhaps some of James Bond's (Connery's silver screen alter ego) suave and debonair style will rub off on us, too. We'll learn to introduce ourselves to strangers on the flying field instead of just glaring at them. I can see it now! With an outstretched hand I'll introduce myself in lames

Bond's inimitable style, "Funk...

stirred) will be optional.



by Kevin Funk

Imost every issue of this magazine features a "Tips & Tricks" column in which readers share their ideas to make rocketry easier, safer, and more fun.

I've submitted dozens of ideas for that column myself only to have Sport Rocketry editor, Steve Weaver, call me to explain that they just aren't suitable for publication. I can't imagine what he considers "unsuitable" about my work, but I think I've found a way around this constant rejection.

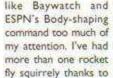
Using my computer hacking talents, I'll tap into the giant Sport Rocketry mainframe computer and replace the column Weaver already approved for this issue ("They Looked Good On Paper – EuroDisney, Olympic Triplecast, and Enertek") with my own Tips & Tricks. If you're reading this, my computer hacking skills speak for themselves!

My favorite tip involves that goofy hard hat with the drink holders on it. You've probably seen it in mail order catalogs or during a televised sporting event when the camera zooms in on a drunken fan actually wearing one. Two glant straws run from the beverage holders on top of the hat down to the wearer's mouth for no-hands-required rehydration. This hat is a must have for every rocket builder, and here's where the tips & tricks come in!

Use only one of the beverage holders for an actual beverage. In the other holder, place a bottle of white glue, upside down, with the bottle's tip inserted into the glant straw. Gravity will ensure a slow, but steady, flow of glue while you're building. (Just remember which straw delivers glue and which delivers your drink!)

I like to watch TV while building my rockets and so I make convenient use of a coffee table parked in front of the set. I like to channel surf, too, but it can be distracting and time consuming to have to constantly stop what I'm doing to reach for the remote. The trick here is to tape a 24" long dowel to the frame of your glasses (the part of the frame that runs back to your ear). Make sure that at least 18" of the dowel projects out in front of your face. This will allow you easy hands free access to the buttons on the remote as you're hunched over the rocket you're working on.

While on the subject of TV, I've learned that some programs are better suited for viewing during a building session than others. Shows



fins I tried to glue on while watching Baywatch. (Programs like these have also caused me to take a drag on the wrong straw from my hat! Ugh!) To get the most work accomplished during your building session, stick with "talking head" programs like Donahue, Geraldo, etc. If you must watch an action/adventure show, watch repeats of episodes you've already seen so you'll know when to look up for the car crash, explosion, etc.

It's important to keep a good supply of body tubes around and this tip involves the beloved BT-80. Even if the rocket you're building doesn't require a BT-80, keep one handy in the event you take a drag on your beverage straw and discover you're running on empty. Don't panic! Grab that BT-80 and use it like a megaphone to order up a fresh supply of liquid refreshment! My manservant has no problem hearing me when I run out of iced tea: "Tea me!" I get a fresh supply of tea while hardly breaking my building session stride. Along with your liquid refreshment you'll also want some snacks to nibble on as you build. The main tip here, of course, is to avoid greasy snacks like chips of any kind, pretzels, and Slim Jims. With the exception of chocolate, candy is a good snack and here's yet one more tip involving your beverage hard hat. Some brands of licorice are packaged in a spaghetti-like form: one long, thin, strand of candy. If you've finished with your beverage, or if you're not using the other straw for an I.V. glue drip, thread this thin licorice through the straw! As it dangles out the end of the straw near your mouth, you'll be assured a constant supply of glucose to keep your building session going all night long.

If you don't like licorice, it's possible to fill the straw with the contents of 10 or 12 Pixie Stix. (And wouldn't you know it? Those empty Pixie Stix make great launch lugs!) It does require a knack to inhale just the right amount of this powdery candy without coughing into the straw and blowing Pixie dust all over your head. You'll get the hang of

it, I'm sure, but should it ever happen, just brush the candy out of your hair and into the main body tube. That's right, you're using my final tip: Pixie tracking powder!



by Kevin Funk

just got back from the mall where I spent a few hours waiting in line so I could sit on Santa's lap and rattle off the items I want for Christmas. Aside from the steely stares from some of the kids in line behind me, it was a worthwhile experience. And before you start staring at me too, let me assure you I had a perfectly valid and ingenious reason to go one-on-one with St. Nick.

Over half of the stuff on my Christmas wish list includes reloadable and single-use high-power rocket motors of one kind or another, the kind of motors that are increasingly difficult and expensive to ship. It seems that just when we get the hang of one new shipping rule, another rule is issued that supercedes it and we're back to square one. So why bother with complicated, ever changing, shipping regulations and expensive hazardous materials fees when, for at least one day a year, Santa can deliver the goods for free?

I don't want to say that Santa operates above the law, but when's the last time you saw a picture of his sleigh with "EXPLO-SIVES" placards on it? For that matter, aside from possibly filing a flight plan with our good friends at the FAA, I don't think Mr. Claus is answerable to anyone at our overactive regulatory agencies in Washington, thank goodness.

To my delight, Santa assured me that he could indeed deliver the high power motors I wanted, and he nodded attentively as I checked off each motor on my list. Occasionally he even offered expert guidance by asking what rocket I planned to use with a particular motor. When I told him I planned on using an Aerotech K550 in a LOC Magnum, his little round belly shook like a bowlful of jelly as he laughed and roared, "Excellent choice!"

When I had finished spilling my greedy guts and one of Santa's elves was stuffing a candy cane into my hand, I decided to come clean with the man in red. "You know, Santa," I explained, "Even though you can leave these motors under my Christmas tree, some of them may not be California certified and I won't be able to fly them on Christmas Day." With a wink of his eye, Santa pulled a small rubber stamp out from under his belt and held it up for me to see. The stamp had the seal of the California State Fire Marshal on it. The jolly old elf laughed in spite of himself and I knew that any high power motor I would find on Christmas morning would be legal to fly in my home state thanks to that little rubber stamp.

I was so impressed with Santa's ingenuity that I gained new respect for the man. Sure, I had always held him in high esteem – who wouldn't?

Santa is his own boss and works only one day a year. Where do I sign up for a gig like that? But now that I realized he was "one of us," a lover of fire and smoke and honking huge rockets (no wonder his clothes were all tarnished with ashes and soot), I began to tiptoe around the idea that Santa could help his fellow high-power pals more than just one day a year. He could become a legend (okay, an even bigger legend) by operating an overnight motor delivery service free from the red tape that is strangling the high-power side of our hobby. "Claus Carrier Service" – the idea was a natural!

The children waiting in line to see Santa began to hiss and boo as my time on Santa's lap rolled on. The elf that had moments earlier stuffed a candy cane into my hand, now tried to pry it loose while another, more robust elf began to kick me with one of his pointy shoes.

No matter, I began to outline my idea to St. Nick who, I must admit, seemed also to be tiring of my company. I explained how the "Claus Carrier Service" would resolve the main issues of concern expressed by the BATF (Bureau of Alcohol, Tobacco and Firearms, the federal agency empowered to regulate the high power motor market).

No one would need a storage magazine or explosives permit for transporting H and above motors if they were delivered directly to the launch site. And I'm sure local residents in Kansas would allow Santa landing privileges on a nearby roof for motor delivery to LDRS. And there's no question that Bruno's Restaurant near Black Rock, Nevada wouldn't mind Santa parking his sleigh on the roof for a night or two to make deliveries to the FireBalls launches.

The "Claus Carrier Service" would prevent terrorists or other evildoers from obtaining high-power motors, a major concern of the BATF. After all, don't forget that Santa keeps extensive records regarding who's been naughty and who's been nice.

The children in line were now waving torches and brandishing pitchforks. Several children, dressed in leather jackets, were stripping parts from my wheelchair. I realized my remaining time was short. As I hurriedly finished my pitch, I explained to Santa that the only negative feedback for the "Claus Carrier Service" may come from the Humane



Society. They may be concerned about a possible, fiery explosion in the sleigh that might harm Santa's reindeer. "I hadn't thought of that," Santa mused, running his fingers through his long white beard. "What would happen if something like that really happened?" he asked guardedly.

"Free reindeer burgers for everyone?" I sheepishly answered.

I don't remember much after that. I have a vague memory of a sharp pain in the seat of my pants and the sensation of flying through the air over hordes of children cheering me as I flew by. "So this is what it's like to be Santa Claus!" I remember thinking, before everything went dark and I settled down for a long winter's nap.

by Kevin Funk



when it comes to accepting people from all walks of life

into our little corner of the hobby world. Rarely is a second thought given to a person's ethnic or religious background and that's the way it should be. Despite the differences among us, our love of building and flying rockets bonds us together, no questions asked. I must confess, however, that I do harbor feelings of animosity toward one group of rocketeers, a peculiar class of hobbyists known as "Rocket Collectors."

Collectors have a dual personality. Despite their obsession for collecting anything and everything having to do with sport rocketry, they look just like you and me. While their closets, garages and rented storage units are overflowing with collected booty, you'll never see a Collector displaying his loot in public. The fellow flying the classic Estes Mars Lander kit at a launch is a rocket fan; the Collector is the one that will sidle up to you and mutter in a subdued tone, "I've got four of them at home...." And, of course, all four of the Mars Lander kits belonging to the Collector are sitting on a shelf, still in their original packaging, and will never be built, let alone flown.

I guess Collectors can't read. If they could, they'd see that what they're collecting are "Flying Model Rockets." It says "Flying" right on the package! It doesn't say, "Static Model Rockets' or "Storage Model Rockets." These kits were designed and engineered to take to the skies or blow up on the pad or whatever else it is that we buy model rockets for.

It's easy to spot a Collector at the hobby shop. They buy two of each rocket kit under the pretense that they'll "build one and save one." Yeah, right. You know that both those kits will never see the light of day after the Collector gets them home, because when the clerk asks if the Collector needs motors for those kits he rolls his eyes and whines as if annoyed, "Nooooo...."

Although Collectors don't buy rocket motors to use in their rockets, they do buy motors for their collection. This aspect of the Collector's behavior doesn't bother me as much as stashing away perfectly good kits for future sale or use. Twenty or thirty years down the road those kits can still be built and flown, but I sure wouldn't use a motor that old to launch it with! A twenty year old motor ceases to have any value except as trade bait for another Collector or as a flammable paper weight or doorstop.

Despite my hostility towards Collectors, I do count several as friends and colleagues and we get along pretty well (at least until this column sees print)! One of them recently invited me into his sanctum sanctorum to gaze upon his accumulated treasure. To protect our friendship and, more importantly, his collection, I won't use my



friend's real name—I'll just call him Rob Stanford.

As Rob prepared to unlock the storage vault built into his bedroom closet, he handed me a

pair of night vision goggles. "Put these on," he commanded. "Light damages the shrink wrap on the kits and can fade colors on the boxes." I started strapping on the goggles and Rob handed me a raw T-Bone steak. Then he turned the lights off in the bedroom. I activated the goggles and saw Rob standing in front of me, bathed in a green haze. Before I could ask about the steak, Rob had worked the huge combination lock on the vault and pulled open the massive door.

I could hear growling sounds coming from within the vault and as Rob stepped aside I came face-to-muzzle with a Pit Bull. The Pit Bull was wearing night vision goggles, too, and seemed to be growling more out of confusion than intimidation. "Hurry! Throw the steak!" Rob barked. The pit bull barked, too, apparently having lost sight of the slab of meat after I threw it behind me. The dog ran past us and collided with a wall. "It's safe now," Rob grunted.

Once inside the vault, Rob closed the door behind us. I must admit that I marveled at the racks of old kits and mylar-wrapped magazines, catalogs and newsletters that surrounded me. "I'm impressed. Rob," I gushed.

"This is nothing," he said matter of factly. "My greatest prize lies behind the next door!" Withdrawing a balsa nose cone from his pocket. Rob inserted it into a matching receptacle in the wall. (Note to Collectors: the nose cone was from the Estes boxed Citation Bomarc scale glider kit. Ocooh!) The door slid slowly open and we entered a small room lit by a single bare light bulb suspended from the ceiling. As I took my goggles off, allowing my eyes to adjust to the room's dim glow, I noticed a small man sitting in an easy chair off in the corner. He seemed preoccupied with some task. As I drew closer, the man's features seemed somehow familiar and a sense of dread welled up within me. "Good gosh, Rob, it isn't! It can't be! You've actually collected-

"Vern Estes!" Rob bellowed. "The final jewel in my collection, the father of model rocketry himself!"

As Rob began to alternately whimper and cackle uncontrollably, the man in the chair turned to face me. He seemed in line shape, well fed and groomed, and he even offered up a slight smile. "What's going on here, Vern?" I gently asked.

"Well," he sighed, shrugging his shoulders, "I needed someplace quiet to work on my new book. But do me a favor, will you? If you don't see me at NARAM-37 come back and get me, okay? And don't forget to bring a steak for that darn dog!"

### **EUnstable Rocketeer**

#### By Kevin Funk

A few issues back I wrote about that peculiar lot of rocketeers known for collecting anything and everything having to do with this hobby – the dreaded "rocket collector". An equally intriguing group of rocketeers finds fulfillment by participating in NAR sponsored competitions. Welcome to the world of the Big Time Competitor (BTC), where people actually use and understand the metric system and talk of "thermals" without even thinking about underwear.

Most everyone enters their first contest with some trepidation. It's unsettling to stand at the "check in" line with your first streamer duration model - usually a standard Estes Zinger streamer kit - and then see the guy next to you unfurling a 30-foot streamer made from some red, plastic space-age material that has been folded into neat accordion pleats that allow it to fit into a rocket even smaller than yours! As the Big Time Competitor neatly folds his streamer, he notices you and your Zinger and offers a polite nod and a subdued, "Hey, how you doin'?". You sheepishly grin and look down at yourself to make sure this really isn't one of those dreams in which you end up at school in your underwear.

Don't worry. Your feeling of self worth will improve as the contest day wears on and you see the BTC's fancy streamer fail to deploy and his fragile, streamlined rocket shatter as it impacts on the ground. Hearing him swear, you'll realize that despite your differences you do, indeed, speak the same language. You'll hold your head, and your Zinger, a little higher now as you stride back to your car to prepare for the next flight.

Rocket competitors aren't like you or me. What we mere mortals count on to get us through each day — luck — is disdained by the Big Time Competitor (although I have yet to see a competitor, big time or otherwise, refuse a first place finish simply because they were lucky!)

How best to hold luck at bay? With science, of course! These guys have calculations for determining everything from body tube thickness to wing dihedral (that's "angle" to you and me) for every rocket or glider that was, or ever will be, built for competition. It would seem that the ideal competition for Big Time Competitors wouldn't involve any flying at all — winners would be selected based solely on how closely they had followed prescribed theory and design in building their models!

Speaking of building, another character trait peculiar to Big Time Competitors is their knowledge and use of the metric system. Rather than measuring in inches, they prefer centimeters. Instead of weighing in ounces, they prefer grams. There seems to be something decidedly un-American about this. The United States is proud of its system of weights and measures, only allowing metric measurements to be used in areas where whiny foreigners may be exposed to them - airports and border crossings, for example. I suppose it serves the Big Time Competitors well when they enter into international competition and can speak the same lingo as their geeky, foreign counterparts, but here at home their use of metric measurements can only be construed as nose thumbing the American way of life.

Just as Big Time Competitors rely on science to guide them in designing their rockets, so too do they rely on the Pink Book to guide them in flying their rockets. The Pink Book is the NAR's official contest rule book and is committed to memory by the Big Time Competitor. This is actually a good thing because it saves you and me the trouble of even owning a Pink Book let alone schlepping it to the contest!

Unlike legal and medical professionals who charge a fee for dispensing information, the Pink Book authority (or "lawyer") will offer you his opinion for free, usually without you even asking for it. Don't be intimidated! Even though it's likely you'll have no idea of what the "lawyer" is talking about, you can contradict his ruling by simply asking the opinion of another Pink Book lawyer on the scene. Competition rules are vague and incomplete, so rarely will two Pink Book lawyers share the same opinion on a particular rule. While the lawyers verbally battle it out and lose track of the time, go ahead and fly your Zinger again to add to your Streamer Duration total. And as any Big Time Competitor will tell you, with all the hot air rising from the field, now's the perfect time to catch a thermal for a record setting flight!