



# O.H.M.S.

## Oklahoma Historical Modelers' Society

### NEWSLETTER



Volume 44, Issue 5

May, 2014

#### Coming Events

May 2-- OHMS Meeting. MOM contest.

May 16-17--Region 6 Convention & Contest-- Marriott Hotel & Event Center 9100 Corporate Hills Drive, Wichita KS, IPMS/Air Capital Modelers. Contact [Mark Vittorini](#) 757-440-6846

May 16-- OHMS Meeting. Program Night. Making molds for casting and Sculpting presented by Dave Kauer and Melyssa Smith

May 31--Scalefest--IPMS/NCT-- Grapevine Convention Center, 1209 S Main St. IPMS-North Central Texas, Contact [Michael McMurtrey](#) 972 245-2545

June 6--OHMS Meeting. MOM contest. Open theme

June 6-7--Tulsa Figure Show and contest at the Wyndam Hotel in Tulsa

June 7-8--2012 Heartland Model Car Nationals. Overland Park Convention Center, 6000 College Blvd. IPMS KC Slammers Model Car Club. Contact [Bill Barker](#) (913) 250-0906

June 14--IPMS Metro OKC will host Soonercon at Crossings Community Center 2208 W. Hefner Road. Contact [Greg Rose](#) 405-590-7130

June 20--OHMS Meeting. Program Night. Pictures from recent contests.

#### Meeting Reports

##### **Business Meeting—April 4**

We have been offered a table at the Hobby Show in May at the fairgrounds. We discussed the possibility of attending.

The next two program nights were discussed and the June program finalized. It will consist of slides from some recent contests.

The lack of forms and information to do the trophy sponsorship for Nationals was discussed. Since then, the

problem has been rectified and we have sponsored in Figures Category 327A-Busts.

##### **Model of the Month— April 4**



*Mercedes-Benz 170V*

*Steven Foster*



*F-82G Twin Mustang*

*Kevin Sampson*

*To Preserve the Past for the Future*

Est. 1967—The tenth oldest chapter in the United States  
Region 6 Newsletter of the Year 2011 and 2012



*Do335 Arrow*

*Dave Kimbrell*



*USS Thresher*

*Rick Jackson*



*J-8 II*

*Mike Fetter*

And a work in progress



After much wailing and gnashing, trials and tribulations, keeping the creek from rising and general AMS, we finally saw the results of Steven's efforts. It even won MOM.

### Program Night—March 21

We had the regularly scheduled build night for the second meeting.

### A few thoughts from the Head Chicken...



I got the IPMS Journal shortly before writing this and was pleased to read the editorial by Chris Bucholtz. He was commenting on those that have been saying we are in a dying hobby. He disagrees and presents evidence to counter this belief. I agree with him. We are living in a golden age of model building. More kits of a greater variety of types are currently available to the average person. True, a lot of older shops have closed, but new ones have opened up. The internet has put more stuff within reach than ever before, and even made it possible

for small shops everywhere to reach new markets a world away.

*In the 1960s, to order from Squadron, you filled out a list, added some alternate choices in case of your primaries being out of stock, wrote a check and sent it all off in the mail. Now days, you go on line, click on what you want, pay on line and get the exact order in a few days. Quick is the word and sharp is the action!*

The only thing I would add to Chris's comments is that we need to encourage more people to build models. As a group, we are tending to get older. Model building is a slow, time consuming, solitary activity. (However, *TEXTING* has made a big change in the solitary nature.) We need to make efforts to bring in new blood. Too often, many translate this into meaning new members for IPMS. I care far less that an individual joins IPMS or even OHMS, as long as they take up the art of model building. Don't be shy, talk it up with people when you get the chance.

Dak

## The Dark Side

### THE BIG BANG THEORY.....HAND GRENADES

The British Army *Treatise of Ammunition for 1887* in a few short lines dismissed the hand grenade as archaic weapon. Yet, during one week of WWI, more hand grenades would be thrown than in all previous history. There has always been a sound reason for the individual soldier to make a big bang.....if for no reason than psychology. However, as Corporal Brown (David Niven) said in **The Guns of Navarone**, "Making things blow up is easy, the trick is not being around when they do." Such was the problem facing those who chose to throw bombs at the enemy.

Of course, grenades go back a long way. The word comes from the Spanish grenada....for pomegranate. Up until around WWI, they were mostly a container filled with black powder and a fuse you had to light; mainly a weapon of defenders. The Russo-Japanese war in 1904 saw a rebirth of these simple bombs. The Japanese actually produced a cast iron version.



This led to various experiments which were in service by the start of WWI. However, they were not in general service.

The first in service with the British was a development of the 1904 Hale Rifle grenade.



Unfortunately, it was not intended for use in the trenches. The detonator was so designed that if it struck something .....like the back wall of the trench.....it would explode. This naturally put a crimp in its use.

As you can see by the photos, it didn't take long before the various armies started producing hand grenades. The two most famous were the British Mills Bomb



and the German stick grenade commonly known as the potato masher.



The Germans also had an "egg" grenade similar to the Mills.

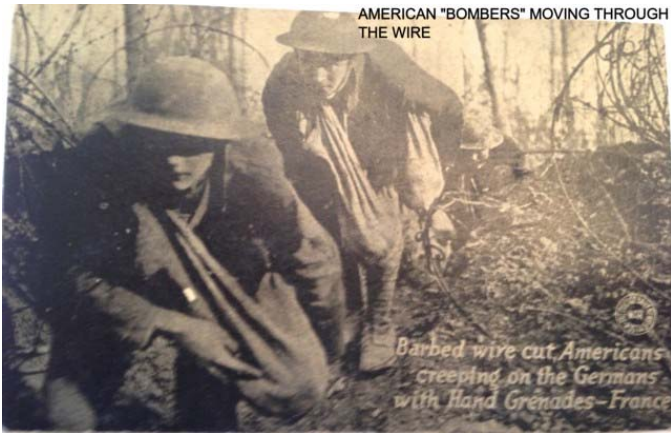


The American grenade was a development of the Mills device. Why we have an "egg" and "stick" grenade is tactical. The stick grenade can be thrown farther and is primarily a concussion grenade. Thus it is used in the assault. The egg grenade is a fragmentation grenade and is best used for defense. Of course, in the real world, they get used anyway the soldier wants.....sometimes even for fishing.

3 to 5 seconds was the average time of the fuses used. Most grenades require the user to pull or push an element that starts the explosive train. Once this was done, there was no turning back. (See the problems with the Holy Hand Grenade of Antioch in *Monty Python and The Holy Grail*.) The Mills Grenade was different in that pulling the pin did not start the fuse. This was because there was a handle that formed along the curve of the shell. This was held in place by the user and was released when the grenade was in the air, ideally on the way to the target. Of course, ideals are not always realized. Still, the Mills design was good enough to become the basis for most modern grenades.

1916 FRENCH





### General Knowledge and Private Information Queen Elizabeth II



When grenades were first used, centuries ago, whole units were formed to handle them....Grenadiers. Over time, these became elites units. During WWI, the British naturally started referring to men assigned to throw grenades as grenadiers. The Grenadier Guards took exception to this and ultimately the whole thing was passed up to King George VI who decreed the modern throwers would be called "Bombers"

While looking for images, I came across this one of grenades rusting in the woods. I don't know if they are WWI or WWII, but still not something to mess with. The German stick grenades just rusted away leaving a glob of muddy looking explosive.

Her birthday was April 2, 2014. She is now 88 years old. However in 1945, at the age of 19, she was a driver in the Women's Territorial Auxiliary Service; service number 230873. She made her first solo public appearance in 1943 when she visited the **Grenadier Guards** at the age of 16. Here are a few pictures of her at age 19 working on a "Tilly", the light utility car that Tamiya has kitted in both 1/35 and 1/48. And there is a nice 1/35 **SKP** figure that looks remarkably like her standing in front of the Tilly with her cap on.



*To Preserve the Past for the Future*  
Est. 1967—The tenth oldest chapter in the United States  
**Region 6 Newsletter of the Year 2011 and 2012**



Dave Kimbrell

**Mind of the Married Modeler**



**Salem Maritime National Historic Site**



I am fortunate indeed. Well, as of this writing, the glass appears more full than less. I was recently invited to an all-expenses-paid mass spectrometry workshop in Salem, MA, courtesy of Waters Corporation. It was a quick trip and there was not very much time for play. I had wanted to catch the Boston Bruins and a National Hockey League game but it just so happened that the Olympics were occurring at the same time and the NHL was on break. This only happens every four years. Little free time is often the case on these quick workshops and I have been to Salem before and been given no opportunity to check out anything in this historically rich city. This time before I left the lovely confines of Oklahoma I went down to my basement and swore on a stack of WNW kits that I would see something historically significant.

I arrived in Salem on a Wednesday afternoon during a bit of snow which was quite common this year in New England. On the way to the hotel there were 15 foot piles of snow everywhere.



My home base was to be the Salem Waterfront Hotel. Upon arrival at 4:45pm, I checked in, went to my room and opened the drapes. What did I see, but the towering mast of some tall sailing ship in the nearby ocean harbor. I was like an 8 year old boy looking out the hotel window at Disneyland. Now I had 2 hours before dinner and even though I had been up for 13 hours, I knew my opportunities for sight-seeing were very limited. So I changed into some warmer snow friendly cloths and hurried down to the front desk. I questioned the front desk attendants about the mast that I could see from my room window.





Well it turns out that the hotel is situated in Pickering Wharf and is a block from the historic wharves of Salem. The ship is the *Friendship*, a reconstruction of a 171 foot, 3-masted, Salem East Indiaman built in 1797 and is a prime part of the National Park Services' **Salem Maritime National Historic Site** (<http://www.nps.gov/sama/index.htm>). I highly recommend this site. I really had no idea how important Salem was in early Maritime history.

So out the door I went with my digital camera in tote to see how close I could get to it. It was 4:45pm and Salem was blanketed in heavy February snow. I doubted that I would be able to do to do much, but I walked through the snow to get as close as possible. The ship was docked with access around the other side of the dock. This would equate to a 2 block walk in the snow. So, the first night I simply took a few pics from across the water.



The original three-masted, square-rigged, 342-ton vessel, *Friendship*, was registered in 1797 to merchants Jerathmiel Peirce and Aaron Waite. She travelled the world trading for exotic spices, sugar and coffee, making 16 voyages to China,

Java, Sumatra, Madras, London, Hamburg, Archangel, St.Petersburg, and other European ports (<http://www.salemweb.com/frndship/>). She was captured by the British in the War of 1812. Today's *Friendship* is based on a model of the original located at the Peabody Essex Museum ([http://www.pem.org/collections/1-maritime\\_art\\_and\\_history](http://www.pem.org/collections/1-maritime_art_and_history)).



The last day of the workshop I had several hours to spend before dinner. So when I returned to the hotel I took off in the snow; first stop the Visitor's Center about a block away. The sign out front said "CLOSED"! The place was being remodeled and many of the contents had been temporarily moved several blocks away. No big deal it was the ship that I sought anyway.



So I trekked on to the entrance ramp to the ship and guess what I saw? A chain halting my entrance onto the ship and another sign that said: "CLOSED." I saw a National Park Service worker-bee emerge from the building next to the ship and told me that access to the ship was closed because of the unagreeable weather.



Thus all I could do was take pics of the ship and walk to the end of Derby Wharf. All the 9 buildings that are part of the 9-acre National Park Site were also closed. Well next time perhaps I can plan to take an entire day to see this place. It is quite historic and tells the good tale of Salem and how it was a major port in the 18<sup>th</sup> and 19<sup>th</sup> century.



Foiled again! I seem to run into bits of bad luck now and again over the past few years when I make visits. First it was the “Great War in the Air” display that was closed for remodeling at the **Smithsonian** in 2007. Then a year later when we visited the **Owls Head Transportation Museum** in Maine many of the WWI planes had been moved and were in storage to make room for a Bonham’s auction. Granted the auction was an incredible display of old cars and motorcycles. I still had my hopes to see WWI and pre-WWI planes.



I have had a fascination with tall ships since 1975 when I spent the summer in Connecticut in a town not far from **Mystic Seaport** (<http://www.mysticseaport.org/>). This was my first up close look at these ships. A year later came the grand bicentennial festival in 1976. I was taken in by the celebration that occurred in New York City where many tall ships came from all over the world. I was not there but did watch every minute I could on television. I have been fascinated by them ever since. Of course like many young lads I had a fascination with pirates and buccaneers. Modeling wise I have never tried my hand at one of these ships. There are of course many available from *Heller* and *Revell*. Then of course there are the wooden kits. This is a whole different modeling world than the one I live in. I do have a Viking ship and a Greek Trireme, but I have yet to purchase one of the majestic tall ships. Yet..... This is probably a good thing for at the rate that I build, it would take me 10 years. Perhaps someday.



Steven Foster



## BATHTUB ADMIRALS

### Revisiting the Battlecruiser Question

Since the article on battlecruisers a couple of months ago, I found some reading (one book and two articles) that focused on the battlecruiser and they prompted me to re-open the subject. Lucky you!

The first is an Osprey book *British Battlecruisers 1914-1918* by Lawrence Burr. Next is an article in the 2011 hardbound edition of the quarterly *Warship* magazine called “High-Speed Thoroughbreds: The US Navy’s Lexington Class Battlecruiser Designs” by Trent Hone. The two together make a case for the battlecruiser, although for very different reasons.

Finally, there is an article, “The Loss of HMS *Hood*—A Re-Examination” by W. J. Jurens, that comes from the Second Quarter 1987 issue of *Warship International*. The article was an analysis of the loss of the *Hood* at the hands of the *Bismarck* and addressed the possible sources of the fatal explosion. In doing so, the author looks at several pieces of data that I was previously unaware of. It has caused me to change what I thought I knew about long-range combat and how it pertains to the battlecruiser.

### Battlecruisers Were GOOD Ships—If Used Properly

Burr has as a primary premise that there was nothing wrong with the battlecruiser as a concept and it really was the forerunner of modern concepts of ‘projection of force’ that is currently embodied by the fast attack fleet centered around the aircraft carrier. His arguments focus in three areas:

- Independent scouting and commerce protection—the battlecruiser’s intended purpose—was well performed.
- The (British) battlecruiser was actually a hardy ship as evidenced by the performance by *Lion* and *Tiger* at Dogger Bank.
- The destruction of *Indefatigable*, *Queen Mary* and *Invincible* at Jutland was mainly due to poor safety practices and not design flaws.

### The High-Speed Scout

Hone’s article looks at the battlecruiser from a purely American perspective. The US Navy had a very different philosophy in how to fight battles and also had a completely different set of requirements to meet. England didn’t have a Pacific Ocean with many new possessions to look at defending remotely. Any defense of British interests would mainly fall on the Australians or squadrons based in Singapore or India. Both made range a smaller factor to them versus an American fleet starting from the West Coast or even Hawaii.

The main difference between American and British (Fisher’s) philosophy on the ships was in the view of speed. As previously stated, Fisher believed that speed equaled protection. He was willing to sacrifice armor to achieve speed and maintain the largest possible hitting power. The US refused to accept speed as anything but a way to gain an advantageous position in battle. Once there, sufficient armor was still necessary for a successful engagement.

One thing I hadn't realized was that both countries felt the need for battlecruisers in fleet operations due to weather. There were many instances where the cruisers and destroyers assigned to a battle group could not keep pace with the battleships in rough seas or were damaged when they could. The loss of the 'eyes' thus made the battleships vulnerable to an enemy who could scout and make plans from the intelligence that a larger scouting vessel could provide. Naval exercises showed when a fleet lost or didn't have a scouting arm, it invariably lost the engagement or suffered more significant losses.

### Flaws in the Arguments

If you go back to my previous article or look at Fisher's commentary on the battlecruiser directly, you will see that the core of his position is that he wanted a ship that could dictate the terms of battle. His ship would attack when conditions were overwhelmingly in his favor or run away if the odds were against it. Also at the core is the fatal flaw of the argument—YOU WILL ALWAYS BE IN A SUPERIOR SHIP.

Fisher never seemed to consider that a battlecruiser would face off against a ship of equal speed and armament. Once your opponent is as fast as you are and mounts the same guns, then what? He never seemed to consider that improvements in fire control would continue to make hits more common in battle, requiring the ship to be hardier than before. Once the inevitable happened, speed as armor becomes moot and armor as armor becomes critical.

*Or so I thought.*

### Did Battlecruisers Really Have Insufficient Armor?

Battlecruisers have always held the reputation as being under-armored. Jutland was always Example A. *Hood* was Example B. Yet there are some interesting pieces of information that can be gleaned from the gunnery tables the Germans produced for the *Bismarck* and *Prinz Eugen* reprinted in the Jurens' article.

RANGE TABLE FOR 38cm SKC/34 <sup>51</sup>				
Projectile Weight 800kg		Initial Velocity = 820.0 M/S		
Range (Meters)	Angle of Fall (Deg.)	Time of Flight (Sec)	Striking Vel. (M/S)	Prob. Error (Meters)
14000	9.9	20.7	581	49.5
14500	10.0	21.7	575	50.0
15000	10.5	22.4	569	50.4
15500	11.0	23.3	561	50.9
16000	11.5	24.2	556	51.3
16500	12.2	25.0	550	51.8
17000	12.8	26.0	544	52.3
17500	13.3	27.0	537	52.7
18000	13.9	28.0	532	53.2
18500	14.5	29.0	527	53.6
19000	15.0	30.0	520	54.1
19500	15.8	31.0	515	54.5
20000	16.4	32.0	510	55.0
20500	17.0	33.0	507	55.5
21000	17.8	34.0	502	56.0
21500	18.3	35.0	498	56.5
22000	19.0	36.2	492	57.0
22500	19.9	37.3	489	57.5
23000	20.7	38.4	485	58.0
23500	21.3	39.5	482	58.5
24000	22.0	40.6	478	59.0

Bismarck table

RANGE TABLE FOR 20.3cm SKC/34				
Projectile Weight = 122kg		Initial Velocity = 925 m/s		
Range (meters)	Angle of Fall (Deg)	Time of Flight (Sec)	Striking Vel. (M/S)	Prob. Error (Meters)
14000	11.0	21.3	483	64.5
14500	11.95	22.4	472	65.0
15000	12.8	23.4	463	65.5
15500	13.8	24.5	451	66.0
16000	14.5	25.7	441	67.0
16500	15.5	26.9	431	68.0
17000	16.5	28.1	424	69.0
17500	17.5	29.5	417	69.5
18000	18.6	30.6	408	70.0
18500	19.7	31.9	400	71.1
19000	21.0	33.2	394	72.5
19500	22.0	34.6	388	73.2
20000	23.2	36.0	383	74.0
20500	24.5	37.3	378	75.0
21000	25.9	38.7	372	76.0
21500	27.1	40.1	370	77.5
22000	28.7	41.5	367	79.5
22500	30.1	43.0	363	80.4
23000	31.5	44.6	360	81.0
23500	32.8	46.2	358	82.8
24000	34.1	47.8	357	85.0

Prinz Eugen table

When you look at the two gunnery tables, you see shell performances at various ranges. The first thing I noticed is the substantial drop-off of the impact speed of the shell versus the original muzzle velocity. For *Bismarck*, the initial muzzle velocity of her 15-inch guns is 820 m/sec for a shell weighing 1764 lbs. At the most common battle ranges of late WW I—14,000 to 18,000 yards—this shell would have an impact speed of 581 to 532 m/sec. This is a loss of almost 30-35% of its velocity. The *Prinz Eugen*

shells performed even worse, losing 50-55% of their velocity. Since the majority of German and British battlecruisers of WW I mounted guns of between 11 in. and 13.5 in. (and ignoring improvements in powder, shell design and gun caliber) their performance should be in the ballpark somewhere between these two.

### Plunging Fire

This term has always meant to me a significant angle such as 45° or greater. Most of this comes from the understanding that many guns were able to elevate to 30° or more and could fire well over 20,000 yards. What clouded my opinion was my greater experience with WW II ships that did have this ability. Most ships built before and many during WW I could only elevate 20° or less *because any more was a waste since they couldn't be properly aimed.*

By looking at the gunnery table again, we see that the extreme angles don't exist at most normal battle ranges. Bismarck's shells fall at a mere 16.5° at 20,000 yards.

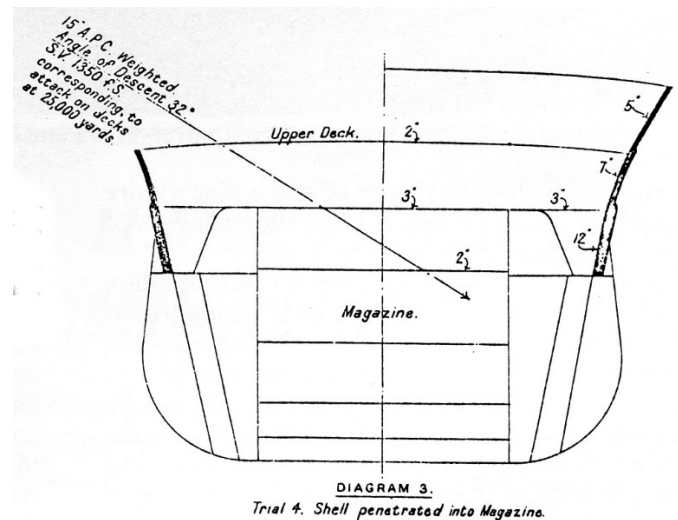
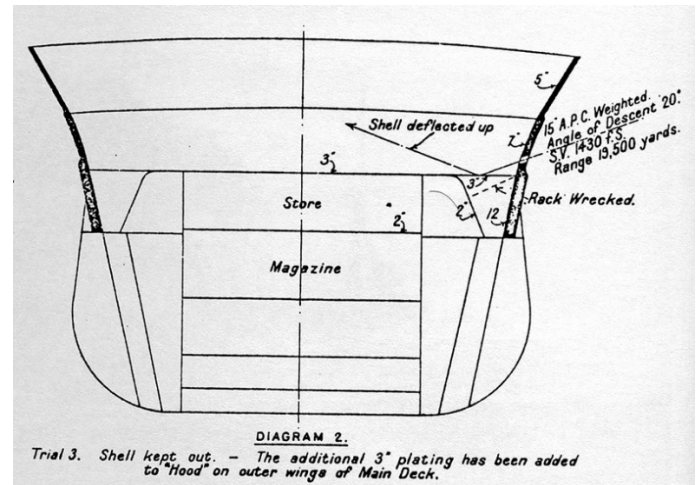
This range is usually at the outside edge of most battles due to weather conditions, **visual** fire control equipment, smoke, etc. in WW II. In WW I it was even less. Leading into the war, most countries were just beginning to develop the ability to have an effective battle at more than 12,000 yards in good weather. Still, plunging fire was being discussed and incorporated by ship designers. It's become obvious to me that what is actually considered plunging fire comes in at much shallower angles than I previously thought.

### My Doh! Moment

If shells are hitting at lower velocity, the old "inch of armor for an inch of shell" axiom is BS. The shallower angles mean it is much harder to lob a shell over the top of the belt. Those that do make it are hitting at such a glancing blow that even a few inches of deck armor stand a chance of deflecting the shot.

Also, like Khan Noonien Sing, I failed to think in three dimensions. While I always knew that countries would angle their armor belts to increase the effective thickness of the armor, I completely failed to take into account obliqueness. Not only is it virtually impossible for a shell to arrive at the side of the hull at a 0° angle, it almost never happens to come in perfectly abeam. Thus, the effective thickness of the belt is increased even more.

This is also borne out by a couple of additional diagrams in Jurens' article from the *Hood* protection tests held in 1920 on a hull mock-up.



In Diagram 2, the 15 in. shell has arrived at a 20° angle traveling at approximately 460 m/sec fired from 19,500 yards (somewhat poorer performance than the *Bismarck* would have 20 years later). The shell pierces the upper 7" belt but is defeated by the 3" main deck armor behind it. Whether there was any obliqueness in the test, the article doesn't say.

In Diagram 3, the shell traveling 25,000 yards arrives at 32° and 435 m/sec. With a high probability of going over the belt, it succeeds in piercing the accumulated 7" of deck armor.

So, post WW I, almost the biggest shell fired by any navy has difficulty in defeating the armor of a battlecruiser with a belt thickness half its size. (It's a shame *Hood* didn't actually get 7 in. deck armor. Her three decks only added up to 6.25 in. Would the extra ¾ have made a difference?)

Scale back the performances to 1907 standards, and the protection of England's first battlecruiser, HMS *Invincible*, with a 6 in. main belt and decks of 2.5 in. is not so outrageous. Fisher's biggest mistake was not to anticipate the improvements in gunnery that would occur over the operational lives of these ships. This is particularly damning since he was a driving force behind this kind of effort in Britain. Did he somehow think everyone wouldn't/couldn't do the same?

As for me, I think I will be a little slower to pile on when someone is condemning the battlecruiser as a failed design. Poor management was as big a culprit as poor design in the most widely quoted examples. Had the aircraft not developed as it did, the scouting task would have been retained by the battlecruiser for much longer and we may have seen that the negative events at Jutland were the exception and not the rule.

Rick Jackson

### Our Sponsors

We have several local hobby shops that really deserve recognition and our support. Send some business their way.



**FLAGSHIP MODELS**  
Warship Kits  
Ordinance Kits  
Detail Sets  
— of the —  
**AMERICAN  
CIVIL WAR**  
www.flagshipmodels.com

TM



**MODEL AIRCRAFT LABS**  
Since 1945  
**M. A. L. HOBBY SHOP**  
Since 1948

OPEN MON. 1:00 TO 6:00  
TUES.-WED. 12:00 TO 6:00  
THUR.-FRI. 10:30 TO 7:00  
SAT. 9:30 TO 6:00

**63 YEARS**

MILDRED & EDGAR SEAY, SR  
Founders  
**108 SO. LEE STREET**  
IRVING TEXAS 75060

**EDGAR SEAY JR**  
**972-438-9233**

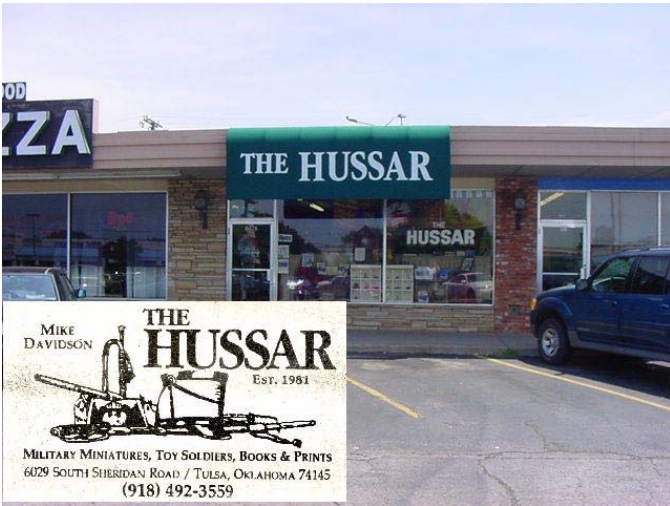
**CRM HOBBIES**  
OUT OF PRODUCTION MODELS-FULL AFTER MARKET

5101 EICHELBERGER ST  
ST LOUIS, MO 63109  
314-832-4840

**CHRIS MERSEAL**  
OWNER

CRM@INLINK.COM


CRMHOBBIES.COM



**THE HUSSAR**  
EST. 1981

MIKE DAVIDSON

MILITARY MINIATURES, TOY SOLDIERS, BOOKS & PRINTS  
6029 SOUTH SHERIDAN ROAD / TULSA, OKLAHOMA 74145  
(918) 492-3559



*Bobe's Hobby House*  
"Relax with a Hobby"

ART SUPPLIES FOR STUDENTS & PROFESSIONALS  
FINE PAPERS ~ MAT BOARD ~ CRAFT SUPPLIES  
BEADS ~ CANING ~ CANDLE MAKING  
MODEL KITS & ACCESSORIES ~ FIGURES  
DOLL HOUSES ~ MODEL RAILROAD ~ RADIO CONTROL  
MILITARY BOOKS ~ GAMES ~ PUZZLES ~ KITES

(850) 433-2187  
www.bobeshobbyhouse.com

5719 North "W" Street  
Pensacola, FL 32505

*Challenger* N-SCALE HOBBIES  
"TULSA'S N SCALE SOURCE"  
We're open 24 hours, just not in a row!


Richard Fisher

T-W 5-8, Th-F 12-8, S 10-5  
8753 S. Lewis, Ste. B  
Tulsa, OK 74137  
(918) 298-4800

Mail Order, Repairs  
Custom Painting & Models  
Buy, Sell & Trade  
Challenger@Challenger-N-Scale.com  
Web Site: HTTP://Challenger-N-Scale.com

Phil Howell  
hobbydepot@att.net

**The Hobby Depot**



8013 S. Western Suite D  
Oklahoma City, Ok. 73139  
Ph # 405-634-4444

**Store Hours**

Monday 10am to 6pm  
Tuesday 10:30am to 6:30pm  
Wednesday 10am to 6pm  
Thursday 10:30am to 6:30pm  
Friday 10am to 6pm  
Saturday 10am to 4pm  
Sunday Closed

**TOP SHELF MODELS**

119 South Main Street  
Owasso, OK 74055-3117  
918-274-0433 fax 918-376-2824  
1-866-210-0687  
**Royal K. Stuart** Manager  
e-mail [topshelfmodels@peoplepc.com](mailto:topshelfmodels@peoplepc.com)

# SPACEMONKEY MODELS

James Duffy  
owner

116 rosebud Ln.  
georgetown, tx 78633  
(512) 423-1855

james@rocket.aero

www.rocket.aero  
www.spacemonkeymodels.com

rocket.aero

## IPMS/USA NEW MEMBER APPLICATION

IPMS No.: \_\_\_\_\_ Name: \_\_\_\_\_ FIRST \_\_\_\_\_ M \_\_\_\_\_ LAST \_\_\_\_\_  
(leave blank) Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ email: \_\_\_\_\_  
VISA/MasterCard Account # \_\_\_\_\_  
Exp. Date: \_\_\_\_\_  
Signature: \_\_\_\_\_

Adult: \$25     Junior (17 years old or younger): \$12 DOB: \_\_\_\_\_  
 Canada & Mexico: \$30     Other Foreign: \$32     Foreign Air Mail: \$55  
 Family (Adult dues + \$5, one set magazines, # of membership cards required: \_\_\_)  
 If recommended by an IPMS member,  
list his/her name and member number \_\_\_\_\_ (name) \_\_\_\_\_ (IPMS#)

**IPMS/USA**  
P.O. Box: 2475  
North Canton, OH 44720-0475

Check out our web page: [www.ipmsusa.org](http://www.ipmsusa.org)



# OHMS EVENT CALENDAR

2014

April

- 4 OHMS Meeting. MOM contest.
- 18 OHMS Meeting. Program night. Build Night
- 26 IPMS Houston Modelmania 2014--Stafford Center, 10505 Cash Road, Stafford, TX 77477. Contact [Richard Kern](#) 713-320-3599

May

- 2 OHMS Meeting. MOM contest.
- 16-17 Region 6 Convention & Contest-- Marriott Hotel & Event Center  
9100 Corporate Hills Drive, Wichita KS, IPMS/Air Capital Modelers. Contact [Mark Vittorini](#) 757-440-6846
- 16 OHMS Meeting. Program Night. Making molds for casting and sculpting.
- 31 Scalefest—IPMS/NCT— Grapevine Convention Center, 1209 S Main St. [Map](#)  
IPMS-North Central Texas, Contact [Michael McMurtrey](#) 972 245-2545

June

- 6-7 Tulsa Figure Show and contest at the Wyndam Hotel in Tulsa
- 6 OHMS Meeting. MOM contest. Open theme
- 7-8 2012 Heartland Model Car Nationals. Overland Park Convention Center, 6000 College Blvd. IPMS KC Slammers Model Car Club Contact [Bill Barker](#) (913) 250-0906
- 14 IPMS Metro OKC will host Soonercon at Crossings Community Center  
2208 W. Hefner Road. Contact [Greg Rose](#) 405-590-7130
- 20 OHMS Meeting. Program Night. Pictures from recent contests.

July

- 4 OHMS Meeting. MOM contest.
- 18 OHMS Meeting.--Program night. .Build Night.

August

- 1 OHMS Meeting. MOM contest.
- 2 HAMS 8th Annual Model Car Show and Contest. Cypress Creek Christian Community Center Annex Building Gym, 6823 Cypresswood Drive, Spring TX. IPMS Houston Automotive Modelers Society (HAMS)
- 6-9 **2014 IPMS/USA National Convention & Contest** at the Hampton Convention Center, Hampton VA.
- 15 OHMS Meeting. Program night.

September

- 6 OHMS Meeting. MOM contest **OFFICER ELECTIONS.**
- 14 Fort Worth Scale Modelers SuperCon 2013. Bob Duncan Community Center - Vandergriff Park, Arlington TX, (817) 465-6661, 2800 S. Center Street. Contact David Hawkins 817-605-1433
- 17 Show Me State Scale Model Show—IPMS West Central Missouri-- Vatterott College, 8955 E. 38th Terrace, Kansas City, Missouri.
- 20 OHMS Meeting. Program Night. Slides from Nationals.
- 21 13<sup>th</sup> annual CASM Spuroo-Doo Contest & Swap-Meet, AR Health Center, 6701 Highway 67, Benton, AR, Central Arkansas Scale Modelers - IPMS Lt. j.g. Nathan Gordon, Contact [casmmodelers@gmail.com](mailto:casmmodelers@gmail.com)