

# PROP NOISE

The Membership Newsletter for The Military Aviation Museum

Fall 2010

## Flying Fortress Inbound to Beach Museum

It was almost two years ago that our museum began an active search for a four engine B-17 bomber. Even though over 12,000 were built during the Second World War, today there are only 13 left that are capable of flying. The last time that such an airplane changed hands was Fuddy Duddy, which sold in 2005. It is extremely rare for such an aircraft to ever come onto the market.

Every such remaining bomber in the world was contacted, but all to no avail. The museum got close to acquiring the non-airworthy project stored at the Smithsonian, but at the last moment it was diverted to the Mighty Eighth Air Force Museum in Savannah. Then there were several others that were statics

or projects, but even those were exorbitantly expensive or just not practical to rebuild. Even the Swamp Ghost recently recovered from Papua, New Guinea was inspected and evaluated on the docks of New Zealand, but determined to be too far gone with massive corrosion.

Then, in early 2009, a solicitation call was made by us to a B-17 owner in Fort Worth, Texas because the plane had not flown before. Dr. William Hospers had owned his B-17G since 1979 when he bought it from Dothan Aviation in Alabama. They had used it for spraying to eradicate fire ants throughout the southeast. Dr. Hospers flew it back to Meacham Field in his hometown of Fort Worth. He was an orthopedic surgeon who had a strong affection for these wonderful historic airplanes. His wife, Chuckie, was quoted as saying that when she learned of this new addition to their family, she said, "Do I divorce him? Do I commit him?" However, when he flew into Fort Worth to surprise her with this new airplane, she was won over when she looked up to see the four-engine bomber flying in with her husband at the controls and her nickname on the nose.



B-17 "Chuckie" was built in 1943

*Continued on page 2*

## Biplanes and Zeppelins

It was not an ordinary weekend at the Military Aviation Museum, no it certainly wasn't. Many people came to see the romantic days of aviation come alive during the first Biplanes and Zeppelins WWI weekend event on September 25th and 26th, which unfolded to an array of special events for all.

A little boy asked his dad, "What's that in the sky, Dad?" The dad replied those are tri-planes, they were popular almost a hundred years ago. It seemed the son could not understand, but the two tri-planes held his attention and the little guy enjoyed the planes as they

roared past the crowd. In fact all the spectators were amazed at this sight of two Fokker planes and their display of aerobatic flight.

Other aircraft took to the sky by radio control, a whole squadron of WWI aircraft took off from the runway to entertain the crowd. A total of 11 WWI aircraft models were flying and re-enacting dogfights for the people to see. These radio aircraft look and maneuver just like the real ones and put on a great show for all.



AVRO 504 in flight at WWI air show.

As you were walking around the museum that weekend, you could bump into actors posing as Mae West and W.C. Fields as they strolled together through

*Continued on page 2*

### Military Aviation Museum

[www.MilitaryAviationMuseum.org](http://www.MilitaryAviationMuseum.org)

### Virginia Beach Airport

[www.VBairport.com](http://www.VBairport.com)

### Fighter Factory

[www.FighterFactory.com](http://www.FighterFactory.com)

### Inside this Issue:

New Arrivals at MAM	3
Annual Wings and Wheels	4
MAM Honors Volunteers	5
Brazilian Soccer Team	6
Dinosaurs Roaming	6
Model "T" Historic Cars	6
RC Warbirds Over the Beach	6
Upcoming Events	7
Porsche Event	7
Museum Gift Shop	8

**Fortress.. Continued from page 1**

In March 2009, we went to Fort Worth and met with Doc Hoppers to discuss the possible purchase of his beloved B-17 airplane. To say that he was not interested would be a true understatement, but it was agreed that it might happen at some future time, but then was just not yet the time. A few more telephone conversations were held, but it did not seem to be going anywhere. Then, in March of this year, Doc Hoppers unexpectedly passed away. Chuckie, his wife of over 50 years, was suddenly the new and sole owner of the airplane with her namesake on the nose. For a while nothing happened and then we were encouraged to make contact with her. We softly inquired as to the future plans for the airplane and at first just wanted to participate with its airshow appearances. It had now not flown since 2008 and was in a deep maintenance overhaul of the aircraft. During one of the conversations, the subject of a future sale came up and it was learned that her family was giving it some true consideration. Several friends and relatives were advising her and a price was decided upon shortly after another inspection trip this past August. The sales transaction actually happened

on October 7th. It was the most costly airplane that our museum had ever acquired.

This B-17 (44-8543) left the Lockheed/Vega plant in 1943 destined to become a rare pathfinder bomber. These aircraft had the new top secret BTO radar in the place of the lower ball turret. It is unlikely that this aircraft served in combat overseas, but that has never been absolutely determined. However, it was probably used in a training capacity for this new sophisticated and highly secret radar system.



*B-17 Pathfinder bombers led the raids*

It served with the Air Force until 1959 when it was sold as surplus to the American Compressed Steel Corporation for \$5,026. It has certainly appreciated in value since then. After becoming civilianized and converted to a cargo plane, it was obtained by Albany Building, who used it for hauling

vegetables from the Bahamas into Florida. Then it briefly changed hands again before finding its way to Dothan and a contract with the U.S. Department of Agriculture to spray for fire ants. In 1976 it sat abandoned until Doc Hoppers bought it in 1979.

After over 30 years, Chuckie, the B-17, will begin its long trip to its new home after the first of the year. Where will we put it to keep her away from the salt mist of the nearby ocean? That is the biggest concern facing the museum with this acquisition. It will certainly necessitate

the construction of yet another hangar for this and the other planes scheduled to arrive before the end of next year.

We feel certain that it will return back for visits to Fort Worth, where it has so many old friends that spent endless hours fixing and pampering this beautiful airplane. At other times, we might be like imposing relatives coming for a visit, but often overstaying their welcome. □

**WWI Air Show.. Continued from page 1**

out the museum entertaining the guests with their elaborate attire, wit and wisdom. Military re-enactors that represented several countries were also in full attendance for all to see. A lot of the re-enactors belonged to the Great War Association who keeps the history alive through educational events. It was amazing to see the re-enactors dressed in authentic reproductions of the uniforms, gear and campsites set-up as if you were looking at how the soldiers lived 100 hundred years ago.

Throughout the day, you could also see a



*First World War aviators*

Fokker and a Sopwith 1 1/2 Strutter perform a dogfight above the airfield. Each having different flight characteristics, Jonathan Lichtenstein, on a public address

loudspeaker explained the different strategic tactics each aviator was performing to get the upper hand on his adversary. Then, the loudspeakers played a sound track of real machine gun fire and the combat took on

an actual feel of what it must have been like during the war. Next the Fokker had to land and the allied soldiers rushed to capture the pilot and his airplane. As they were marching their prisoner off the airfield, the German infantry made an attempt to save their pilot. Gunfire encompassed the airfield as opposing forces fought each other. The attempts by the Germans failed as the allies fought them back. It was a great re-enactment to see and experience.

As the day progressed there was great food, lots of WWI airplanes, P-51 Mustang flight simulator rides, an assortment of automobiles such as a 1907 Orient and 1917 Metz,



*WWI re-enactors german capture a German soldier from his Fokker Dr-1*

memorabilia to purchase, original drawings and oils from Russell Smith studios and at night a steak dinner along with a fantastic hangar dance with live music from the Roaring 20's.

As people were walking out the little boy asked his dad why is that man walking like a penguin? The dad replied, "Oh, that is Charlie Chaplin and he was a funny

man in the movies a long time ago." It was a special moment seeing Charlie Chaplin interact with the children at the first Biplanes and Zeppelins WWI weekend and a very memorable moment watching Charlie walk away with his unique style and the artistic movements of his cane. □



*"Charlie Chaplin"*

*Brad Groom*

## New Arrivals at the Military Aviation Museum

### A Trio of 1917 Fokker Dr.1s

Perhaps one of the most identifiable aircraft of the Great War (1914-1918) was the Fokker Dr.I, with its three-wing design. While not as fast as contemporary biplanes, the Dreidecker could easily out climb any opponent. The museum has three examples of this famous triplane, with two of the three



*Triple triplanes fly at the beach*

painted in the colors of German aces as Werner Voss and Rudolf Klimke. It was also flown by the 80-victory ace, the Manfred von Richthofen and the future head of the Luftwaffe during the Second World War, Hermann Göring.

Leutenant Voss of Jasta 11 was fourth ranking ace in the German Army Air Service with 48 victories, six of which were in the triplane. The 19-year old Lieutenant Voss, who was due to go on leave, took off and met the SE5a's of 56 Squadron, in one of the legendary dogfights of the Great War. He single-handedly tangled with at least four British aces of that squadron. Lieutenant Voss was killed in action in his brightly colored blue and yellow Dr.I on 23 September 1917.

Lieutenant Klimke flew his brown and yellow colored Fokker Dr.I with Jasta 27. He had anchors painted on the aircraft. A yellow anchor on each side of the fuselage and a large black anchor on the topside of the tail ... these were applied at the insistence of the pilot's mother for good luck ... he survived the war ... so it must have worked.

Manfred von Richthofen, the famous Red Baron, got his last 20 aerial victories in an all red painted triplane. He reported said,

"[It] climbed like a monkey and maneuvered like the devil."

All three Fokker Dr.Is flew at the recent "Biplanes and Zeppelins" event.

### 1918 Fokker D.VII

The Fokker D.VII is widely regarded as the best German aircraft of the Great War (1914-1918). Manfred von Richthofen championed its development. In January 1918, Richthofen tested the D.VII in the trials at Adlershof but never had an opportunity to fly it in combat. He was killed just days before it entered service. When equipped with the BMW engine, the D.VII could out climb any Allied opponent it encountered in combat. Highly maneuverable at all speeds and altitudes, it proved to be more than a match for any of the British or French fighter planes of 1918. Hermann Göring was one of the first pilots to fly the D.VII in combat.

The museum currently has two D.VIIs on display. An all red painted D.VII is a superbly and accurately built. Mr. Berg of New York spent hours researching and building this example. He replaced the original BMW engine with Hall Scott M5A. The radiator was hand made with 5000 tubes. The plane took 8000 hours of labor and love to complete. To date it has about 220 flight hours. And currently the wings need to be re-fabric.

The second Fokker D.VII, painted all black with a white skull and cross bones on the fuselage, was recently obtained from Mr.



*Fokker D.VII flies from the museum*

Franco Actis of Switzerland. He had acquired the plane from Anthony E. Hutton of Essex England. It had been registered in England as G-BFPL. Originally built in 1978 by Williams Flugzeuge, who registered it in Germany as D-EAWM. Mark Hana flew the plane regularly between 1989 and 1992. The museum's Black Fokker D.VII flew recently at the museum's "Biplanes and Zeppelins" event.

### 1932 Junkers Ju 52

In 1932, Lufthansa placed into service a new three-engine civil transport plane, the Junkers Ju-52/3m. Based on a short-lived single engine model, the Ju-52 first flew in April 1931 and quickly became the workhorse of both the airline and the reviving Luftwaffe. The Luftwaffe, seeing the need for large transport type aircraft, quickly placed the plane into service.

The Ju-52 was built with corrugated metal skin. Parts and pieces stuck out of the airframe, and the corrugated skin, though much stronger than fabric and metal tubes, created stronger air resistance (drag). With three BMW engines of 725 horsepower each, the Ju-52 had a maximum speed of 171 mph and a range of about 800 miles.

At the start of the Second World War, when Germany invaded Poland, the Luftwaffe's 'Transportverband' had an inventory of only 552 Ju-52/3ms; eventually a total of 5,000 planes would fly for the Luftwaffe performing every imaginable mission from troop transport to mine laying on all fronts. It dropped paratroopers in the Netherlands, Crete and later the Ardennes. It carried supplies to beleaguered troops in North Africa, Stalingrad and the Baltic states. The Ju-52 was slow and very lightly armed against fighters. As a result, it suffered horrible losses in almost all actions, especially over Crete, the Mediterranean and Stalingrad. During the war some 13 'variations on a theme' saw improved radios, interchangeable float/ski/wheel landing gear (indicating the wide range of Luftwaffe requirements), better armor and engines, and heavier defensive armament.

*Continued on page 4*

**New Arrivals.. Continued from page 3**

In Spain, Ju-52s were built for the Spanish Air Force, under license by CASA, as CASA 352 (where the museum's aircraft was built), and even France built the airplane, under the designation AAC.1 Toucan.



*Junker Ju 52 has corrugated aluminum skin*

The Museum's aircraft was documented and believed to be CASA 352L (s/n 67) built in May 1950, at its plant in Getafe, Spain, and was one of approximately 170 Spanish built aircraft. It was assigned serial # T2B 176. In 1976, the Spanish Air Force declared the aircraft to be surplus with only 1500 flight

hours and was sold to the Confederate Air Force (CAF). The CAF named her "Alte Tante Ju" (meaning Old Aunt Junkers). She became well known throughout the country making approximately 20 air shows per year. By 1990, the Ju-52 was still flying with the original 725 hp BMW engines. In 1998, the BMW engines were replaced with Pratt and Whitney R-1340's and three bladed propellers.

It is currently painted as a Ju-52 of the 7th Staffel KGzbV1 (1st Bomber Wing of Special Operations). With the identifier 1Z+AR and the markings of the invasion of Crete (21 May 1941).

There are only seven flying examples in the world and the only one flying in North America. Come and see it at the Military Aviation Museum

**1916 Sopwith 1 1/2 Strutter**

The first British fighter equipped with a fixed, forward firing, synchronized machine gun, the Sopwith 1 1/2 Strutter was built in both one and two-seater models. In the latter, the gas tank was dangerously positioned between the pilot and observer. This prompted some airmen to joke that the designer of the aircraft must surely have been German. Not long after its introduction, the 1 1/2 Strutter was replaced by the Sopwith Pup.

With 13 victories, the highest scoring ace to fly this aircraft was Geoffrey Cock.   
Felix Usis



*The Sopwith 1 1/2 Strutter over the Pungo marsh*

**Annual Wings and Wheels**

The sound of historical aircraft, antique autos, and American muscle cars could be heard throughout the day, August 28th at the Tidewater Region, AACA, 37th Annual Meet.

This show had the makings for everyone who enjoys a wide variety of automobiles and vintage flyable aircraft. The local chapter of the Tidewater Region, Antique Automobile Club of America held its 37th annual meet at the museum. More than 250 display cars such as a 1907 Orient Surry, to a wide variety of special interest cars, could be heard and seen with the back drop of classic aircraft flying overhead.

Also on hand, a rare and original Heine Veloix, an automobile which drew a lot of attention.

Many of the members wore period/vintage clothing and Andy Ott a TRAACA Member gave a very informative DVD theater seminar of the "Model T-The Milestone Car".

Two thousand car enthusiasts gathered to show off their pristine cars. Dan Burke, who lives just a mile from the museum, brought his 1975 Chevrolet Vega-Cos-

worth Twin Cam automobile to the show. Dan who is a licensed aircraft mechanic, also uses his skill in restoring unique cars. Mr. and Mrs. Turpin from Newport News brought their Mercury Marauder, which there are only 54 registered. An Avanti II, was at the show with it's owner Joe Geib. There were vehicles that raced in the Can Am Race Series restored by Abacus Racing on display.

One couple trailed in their 1922 International "Red Baby" all the way from Pennsylvania to be at this car show. The owner John Scott said his Dad was a WWII pilot in the B-24 aircraft and he was looking forward



*1907 Orient Surry*

to the show and seeing the aircraft on display. John spent five years restoring his "Red Baby" and collecting the original advertisements, metal toys, wooden tool box, and a gas engine set up in the bed of the truck.

An assortment of unique vendors was also on hand. If you were searching for parts or needed help finding a part, knowledgeable vendors were there to help. A wide range of items that were for sale such as, old gas pump, nostalgia signs, models, T-shirts, aviation art, jewelry, grooming products for your car and even those old movie drive-in boxes you would hang from your window.

As the day progressed the members of AACA handed out many awards to some very special automobiles. As a car shows goes I think Baxter Sawyer from North Carolina, who was showing his wife's black 1967 Camaro RS with a Stroker motor, said it best. "This show has the best collection, mix and different examples of cars anywhere in the Mid-Atlantic area" and if that were not enough the display of flyable aircraft in this museum is astounding.

*Brad Groom*

# MAM Honors the Museum's Volunteers

It was not your normal closing routine for the volunteers, docents and staff of the Military Aviation Museum on September 5th. Usually at 5 p.m. they start the process of making sure everything is in order for the next day and bid each other goodbye for the evening, but that night was special for them and the hundreds who intended. It was Volunteer Appreciation Night at the museum!

Opening ceremony started at 5:30 p.m. with David Hunt, the Museum Director, microphone in hand and hundreds of the museum family in the crowd. Everyone was enjoying refreshments and carefully listening to David and the information he was providing. "Over 25,000 volunteer hours have been recorded so far at this museum by people like yourself and others. You and your family have my sincere appreciation for that." David went on to

explain, the museum has many levels and opportunities to volunteer and we are always looking for individuals from all backgrounds to help.

David first told the audience that all volunteers bring skills that are needed and no more so than the individuals who pilot the aircraft for all to enjoy. All the pilots attended were asked to stand up and they received a vigorous round of applause for their dedication and skill in flying these vintage aircraft. Next on the agenda was going through the list of volunteers who have earned 50, 100, 500, and 1,000 hours. Each group received certificates and awards depending on the level of their hours. Group photos were taken with each group along with David and Mr. Yagen. After the pictures, Mr. Yagen expressed his sincere appreciation for sharing this wonderful hobby we have here. He ad-

dressed future plans of the airport, such as the WWI hangar, an authentic WWI German hangar with actual combat damage, and an original RAF Control Tower that was dissembled and shipped over here for reassembly. At this time, Mr. Yagen invited the wives of those volunteers who were awarded aircraft rides, because of their accrued number of hours, to take a "Royal Ride" with him in the Dragon Rapide.

After all the aircraft rides were completed everyone enjoyed the fine food and delicious desserts. The evening was a great way to mingle and learn about everyone who is part of the MAM family. It was a special night at a very special place, with a lot of very, very special people!

*Brad Groom* □



*Family Membership Awards to volunteers that had given over a hundred hours*



*Flight Awards in a trainer to volunteers*



*Fighter Plane Flights to volunteers (over 1,000 hours meant a flight in a Fighter plane)*



*Volunteer wives disembarking from the Dragon Rapide*

## Brazilian Soccer Team Visit

Recently coming off a win in the new Meadowlands Stadium against the U.S. men's soccer team the Brazilian soccer team enjoys some fun at the Military Aviation Museum riding the open roof double decker bus. This bus makes any occasion a much remembered one, so call the museum for information about how you also can make your next event that much more exciting. ☐



## RC Warbirds Over the Beach

If you wanted to see how Hollywood makes movies with aircraft in them like Top Gun and Memphis Belle, you should have been at the Radio Control Aircraft show at the Military Aviation Museum on September 11th.

The Tidewater Radio Control club presented *RC Warbirds Over the Beach* to a crowd of 500 onlookers who were all amazed at how authentic the aircraft looked. These were 1/5, 1/4, and 1/3 size replicas that are so realistic that some have retractable landing gear, tires that require servicing, and paint jobs that can fool all of us on the big screen to believe that they are using full size aircraft.

As Mark Ward from TRC explained this event was slightly different this year because the general public really mingled with the pilots of the Warbirds and you could really see some eyes light up, especially with the children. With this type of interaction, Mark said he was happy to hear that some people were interested in joining the organization. Also from TRC, Pert Asiatico said this was a great show, even though Sunday was low turnout because of the weather; Saturday they flew over a hundred sorties with an amazing display of aircraft from WWI to modern day platforms. Pert went on to say they had a fly-by with six WWI aircraft in formation which was a first for the club.

With 21 pilots and a variety of aircraft flying, it was just pure excitement when the aircraft took to the air and judging by the sounds of the crowd, they were just as satisfied watching the aircraft take off and fly as they were getting to see these miniature Warbirds up close. If you want to learn more about TRC, please go to [www.Fly-TRC.com](http://www.Fly-TRC.com). ☐

*Brad Groom*

## Dinosaurs Roaming the Airport Museum

Many of our visitors have reported the sightings of dinosaurs grazing near the entrance to the museum. There seems to be a twelve foot tall flesh eating Tyrannosaurus Rex and a Brontosaurus plant eater that living in the adjacent pond. Some might wonder as to what do dinosaurs have to do with airplanes, but then all little boys love such dinosaurs and as they grow up, they also find that they have the same affection and enthusiasm for these magnificent flying airplanes.

Now the directions to the airport are much easier, when we tell visitors to just drive south along Princess Anne Road and

turn in when they see the dinosaurs. Ours are courtesy of Gilbert Ramos of "Jurustic Statuary" in Rancho Cucamonga, California. He came here last month to bring them to life. ☐



## Model "T" Historic Cars

One of the largest gatherings of Model T automobiles on the east coast recently united together at the Military Aviation Museum on August 7th. It was a Saturday filled with cars from the past and rewarding conversations about the mechanics of the Model T, help finding parts, and the exchange of restoration procedures. Owners from across the Mid-Atlantic region brought their Model T's and enjoyed a perfect day of reminiscing about their cars. ☐



*An RC model WWI German Bi-plane and "pilot"*

**Two of our popular events are on the horizon. Don't miss!**

## Upcoming Events

### Trains and Planes

November 26, 27, 28th

9am-5pm on 26th and 27th, 9am-3pm on the 28th

The Military Aviation Museum in association with The Tidewater Division of the National Model Railroad Association is pleased to announce its second annual model train show!

Module Groups Displaying: Tidewater O Gauge Association, South Hampton Roads N-Trak Club, Atlantic Coast S Gauge, Large Gauge Trains, Great Lakes & Southeast-HO Scale

Santa will be flying in on Friday and Saturday to meet and greet for kids of all ages at 1:00pm!

Tell them to get their list ready for Santa.

Marines will be collecting donations for "Toys for Tots".



## Valentines Hangar Dance

Saturday, February 12th

We are in the planning stages of putting together the next Valentine's hangar dance. A 1940's WWII themed event with big band music, swing dancers, prizes for best dressed, food, drinks and lots more! Start looking now for your right outfit from the 1940's to wear. Ladies figure out your correct hairstyle. For those who have been before, we will be adding some new elements to keep it fresh and fun. Look for more details to follow in the monthly eblasts - tickets will go on sale soon.



## Porsche Club of America

The Porsche Club of America First Settlers Region was in full force with their car show held October 23.

It was a car show that displayed some of the finest unique Porsches in the mid-Atlantic region along with exotic cars like Lamborghini, Lotus, and Rolls-Royce. There were also plenty of BMWs, Mazdas, Corvettes, Triumphs and an assortment of older Alfa Romeos, all in pristine condition. You could even see a J Mark dragster and a 900 horsepower Super Snake Ford Mustang. The assortment of Porsches held in one area like this was a treat for all to see.

This event was held to help support the Virginia Beach SPCA and the Food Bank of South Eastern Virginia. The SPCA had some of their well-mannered dogs who needed adoption on the premises wearing please adopt me signs. We are sure many animals went to good homes that day. As the day went on, live music was playing by the local Suburban Key Party band. Everyone enjoyed their music while eating some of the best barbecue around by Zook's Barbecue. ☐



To plan an event at MAM contact Debi Ernest, Event Coordinator at [events@aviationmuseum.us](mailto:events@aviationmuseum.us)

## Museum Gift Shop has What You Need

The next time you visit the Museum; don't forget to stop by our gift store. The gift shop has something for everyone in the family. We have a great selection of t-shirts including ones from all the previous air shows. We also carry documentary and older movie title DVDs; music CDs from the 1940's; and a wide selection of used books on WWI and WWII aircraft. We car-



ry many children's items, such as models, toys, t-shirts and hats. Women can choose from a selection of t-shirts, porcelain mugs, jewelry and "Rosie the Riveter" items like tote bags, dog tags and even a "Rosie" lunch pail. Men have a choice of Hawaiian print shirts, t-shirts or hats with their favorite plane. Men can also get a great buy on our authentic leather bomber jackets, ties, belts and even fighter plane boxer shorts.

Need some help in dressing up for the hangar dance, come by and ask us for advice and we can head you in the right direction as to where to buy that simple

aviator outfit or seamed hose for your favorite girlfriend.

Don't worry if you forget your camera, we sell disposable cameras.

We also carry your favorite plane wind spinners to put out in your yard. Don't know what to get someone for that special occasion? How about a membership to the museum. You can purchase an individual or family membership which includes unlimited visits to the museum for a year, a quarterly newsletter, and admittance to our maintenance facility in Suffolk, VA. ☐



CURRENT RESIDENT

9:00 AM - 5:00 PM  
OPEN DAILY

(757) 721-PROP

1341 PRINCESS ANNE ROAD  
VIRGINIA BEACH, VA 23457

MEMBERSHIP NEWSLETTER FOR  
THE MILITARY AVIATION MUSEUM

