

'The Instruction Sheet'

IPMS / Granite State Modelers Club

Nashua, New Hampshire

Newsletter: January 2023

www.granitestatemodelersclub.org

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Facebook: IPMS/ Granite State Modelers Club

GSMC/IPMS meets the third Monday night (4th Monday in Jan & Feb) of each month from 7 to 9 PM at the Nashua Public Library, 2 Court Street Nashua, New Hampshire. Visitors are welcome to attend. Monthly show and tell pictures are posted on our website. Website maintained by Brandon Clifton.

Club Officers:

President: Mac Johnston (603-648-2244) macatflandersandpatch@hotmail.com

Vice President: Rich Filteau (617-592-4268) r.filteau@comcast.net

Secretary: Rodney Currier (603-726-3876) nickmatt2@roadrunner.com

Treasurer: Edward Mele IV (603-203-9878) emeleiv@gmail.com

Zoom Administrator: Bob Ferri (603-547-7456) ferri@gsinet.net

Meeting Reminders:

January 23, February 27, March 20

Weekend Build Sessions via Zoom:

Saturdays 1-4pm; Sundays 6-9pm

With the rising costs these days President Mac Johnston informed the club that the current dues for membership (\$12) is far below the average club membership (\$20) in the model building community. Though nothing has been voted on, GSM should prepare for a general increase sometime this year.

Rodney Currier reported that the charter renewal paperwork has been submitted and accepted.

Mark your calendars – NoreastCon, the IPMS USA Region 1 regional model show, will be held on April 29, in Albany, NY.

It was suggested that perhaps GSM could provide some sort of incentive to help stimulate participation in the Annual “Pass the Stash” Group Build in September. Perhaps some club merchandise?



Mac was recently contacted by Joel Munson who attended GraniteCon last fall. He was so impressed by our show that he wanted to join a model club in his area (Roxbury, MA). Believe it or not, there are no model clubs in Boston. Upon discovering this, Joel and some of his friends decided to form The Muddy River Club. Flattery doesn't get any better than that in this hobby. Way to go, GSM!

History of The Grumman A-6E Intruder

by Rich Filteau

By the mid-1950s the US Navy was looking for a replacement for its main carrier borne attack aircraft the piston engined, single seat Douglas AD Skyraider. The navy didn't just want to replace the Skyraider they wanted a much more capable aircraft and issued an operational requirement document in October, 1956 followed by a request for proposals (RFP) in February 1957 for an all-weather, two place, twin jet carrier-based aircraft capable of carrying a heavy bomb load. No fewer than eleven designs were submitted from eight manufacturers, Bell, Boeing, Douglas, Grumman, Lockheed, Martin, North American, and Vought. On January 2, 1958 Grumman model G-128 was selected as the winner of the design competition and given the Navy designation A2F, in 1962 under the Tri-Service aircraft designation system the A2F Intruder became the A-6 Intruder.



Grumman was awarded a contract for eight development YA2F-1 aircraft. The Intruder design team was led by Lawrence Mead Jr. whose experience with the computers and electronic on this aircraft would lead to him working on Lunar Excursion Module and the Grumman F-14 Tomcat. The two-man crew consisted of a pilot and a bomber/navigator (BN), with the BN being seated to the right slightly lower and behind the pilot. All models except for the first prototype were fitted with a fixed refueling probe for probe- & -drogue refueling forward of the large two pane window screen. The airframe had a wing with a moderate sweep (52 Degrees) that was designed for max performance at low altitudes while carrying the aforementioned heavy bomb load. Flight controls on the wing consisted of leading edge slats, a "flaperon" (capable of being used as both an aileron and a flap) on the rear edge of the wing and spoiler for roll control directly forward of the flaperon. For its time, the Intruder had a surprisingly sophisticated electronics suite named the Digital Integrated Attack Navigation Equipment (DIANE) system, featuring a cathode tube display in the cockpit that showed the terrain in front of the aircraft giving the Intruder all-weather capability. Also, there was the Basic Automated Checkout



System (BACE) self-diagnostic software. The original design had swiveling jet exhaust nozzles (up to 23 degrees downward) to aid in short take-off and landing (STOL) performance, but the swivel feature was eliminated during flight testing with the exhaust being fixed with a slight downward angle. Another feature of the original design were the perforated dive brakes that were on the sides of the lower fuselage. During flight

testing it was found that they caused instability and were wired shut and the perforations eliminated on early Intruders and eventually the panels were totally eliminated on later models. However, all models of the Intruder had “decelerons” or “boards” these were panels, one opening up and the other down that were located on each wingtip.

On April 19, 1960 the first YA2F-1 Intruder prototype took flight. Deliveries to the US Navy began in February, 1962 and the Intruder became operational with the fleet in 1963. The Grumman A-6 Intruder was only operated by the US Navy and Marine Corps. The last A-6E Intruder left U.S. Marine Corps service on 28 April 1993, 37 years after its first flight and 693 Intruders later in February 1997 the Intruder was retired from service with the US Navy. The A-6 Intruder was never exported beyond American shores. The EA-6B Prowler variant served with the US Navy until June, 2015 and 48 years after the first flight of the A-6 series of aircraft the last EA-6B Prowler was retired from service with the US Marines in March of 2019.



The A-6Es first deployed to the fleet on December 9th 1971 with improved engines and improved systems throughout; solid-state electronics replaced 1950s and 1960s era circuitry. The A-6E was the most capable version of the Intruder. The two radars in previous variants were incorporated into a single multi-mode radar. The DIANE navigation system was also upgraded to the more accurate Carrier Airborne Inertial Navigation System (CAINS). The A-6E continued to be improved thru its service life. All fleet A-6Es were upgraded to A-6E Tram (The Target Recognition Attack Multi-sensor. As the A-6Es got on in the service years their wings began to show signs of fatigue and roughly 85 percent had their wings replaced new graphite/epoxy/titanium/aluminum composite wings. In 1990 the Navy made the decision to end production of the Intruder. A-6E model production was 445airframes. 240 of them were reworked from earlier A-6As, A-6Bs, and A-6Cs.

The ongoing war in Vietnam was the A-6s first call to action. The Intruders all-weather capability and heavy payload carrying ability meant that it was called upon quite often to bomb targets. The A-6A performed its first combat sorties over Vietnam on 1 July 1965, with aircraft



hitting targets south of Hanoi. Very often its mission low altitude mission profile made it vulnerable to anti-aircraft fire, with 84 aircraft being lost to all causes while accomplishing 35,000 sorties between 1965 and 1973.

Normal paint scheme was typical US Navy light gull gray on top and white on the bottom. Nobody could describe the Intruder as a pretty aircraft with its side-by-side seating for the crew and tapering fuselage it looked like a big tadpole, but it could be counted on to

deliver its payload in bad weather or at night, the daytime clear weather close air support mission being better left to the venerable A1 Skyraider.

The Intruder carried no internal armament, but it did have 5 external pylons capable of carrying 18,000 lbs. of stores. Maximum bomb load was six 500 Lb. bombs on each pylon. The pylons were all plumbed so that they could carry fuel tanks. The A-6 would eventually see a career carrying combinations of Mk-82 iron bombs, MK-84 Cluster Bombs, AGM-65 Maverick air-to-ground missiles, AGM-130 Harpoon anti-ship missiles, AGM-88 HARM anti-radiation /anti-radar missiles, AIM-7 Sparrow air-to-air missiles, GBU-12 Paveway II and GBU-27 Paveway III laser-guided bombs and was capable of carrying a nuclear weapon.

December Raffle Winners



Bob Ingalls



Lyn Cushman

Pass The Stash 2022



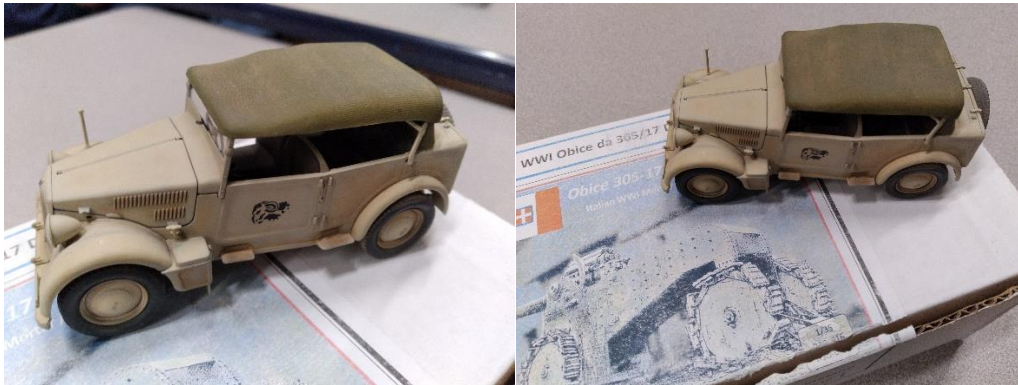
December Show & Tell



Jody Kelm continues to dazzle the club with another figure bust from Mitch's Military. This time a 1/10 bust of the famous 95th Rifles of the Napoleonic Wars. He painted the figure in acrylics and oil washes.



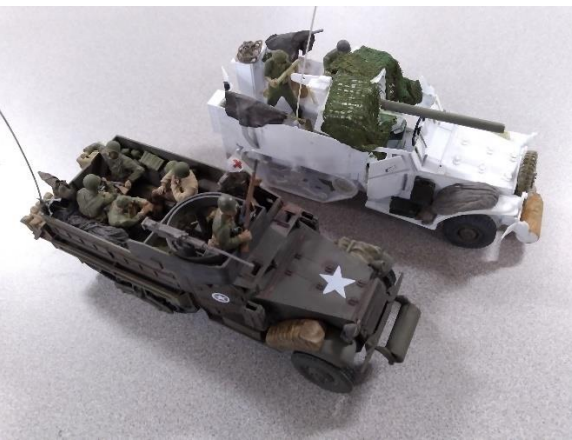
Paul Lessard gave a new paint job and some rails and grab irons to these two diesel engines.



Mac Johnston built this 1/35th Fiat 508 CM Coloniale staff car from Italeri OOB.



Rodney Currier built this Trumpeter 1/32 F4F-3 marked as one of VF-41 assigned to the USS Ranger (CV-4).



Chuck Converse built a 1/72 Jagdtiger from Dragon. Frank Moore built these US Halftracks.



Paul Lessard built this 1/76 AEC Cargo Truck with 5.5-inch field piece from Airfix.

Russ Gosselin is beavering away at Takom's 1/35 British Mark IV "Male" WWI tank.

Hobby Shop Directory

These are the hobby shops that support us and our efforts year after year. Most give our club members discounts, They support our club contests, and stock the supplies and new kits we crave.

Hobby Emporium (978-649-5055) 440 Middlesex Rd Tyngsboro, MA 01879

The Spare Time Shop (508-481-5789) 222 E. Main St Marlboro, MA 01752

North East Trains Model Center (978-532-1615) 18 Main Street Peabody, MA 01960

Double Play Hobby (603-582-4224) 187 Elm St. Milford, NH 03055

Hobbies With A Twist, LLC (603-223-0132) 1 Depot St Concord, NH

~~Elite Hobbies (603-349-0800) 90 Washington St Unit 334 Dover, NH~~

Granite State Hobbies 20 Pleasant St. Claremont, NH (603-504-5605) ajmsugaring@icloud.com

Minuteman Scale Models 472 Amherst St. Suite 21 Nashua, NH (603-921-5048)

Boomer's Books & Empire Models 273 North Stark Hwy Weare, NH (603-529-5644)

IPMS/USA MEMBERSHIP FORM

IPMS No.: _____ Name: _____

Address: _____ If Renewing _____ First _____ Middle _____ Last _____

City: _____ State: _____ Zip: _____

Phone: _____ E-mail: _____

Signature (required by P.O.) _____

Type of Membership ☐ Adult, 1 Year: \$30 ☐ Adult, 2 Years: \$58 ☐ Adult, 3 Years: \$86

☐ Junior (Under 18 Years) \$17 ☐ Family, 1 Year: \$35 (Adult + \$5, One Set Journals) How Many Cards? _____

☐ Canada & Mexico: \$35 ☐ Other / Foreign: \$38 (Surface) Checks must be drawn on a US bank or international money order

Payment Method: ☐ Check ☐ Money Order ☐ Credit Card (MC/ VISA/DISC)

Credit Card No: _____ Expiration Date: _____

Chapter Affiliation, (if any): _____

If Recommended by an IPMS Member, Please List His / Her Name and Member Number:

Name: _____ IPMS No.: _____

IPMS/USA

Join or Renew Online at: www.ipmsusa.org

P.O. Box 1411

Riverview, FL 33568-1411