



For it's long term legacy, the long, very costly war our country fought in Vietnam will depend on the verdict of historians and politicians yet to come. We may not learn of our final contributions and the results of our involvement for many years to come. For many of our generation, this war cost us personally, either through our own contributions or those of family members, close friends or associates. The cost, in terms of human loss, both short and long term injury, will be with most of us for our entire life, much as that related to WW I, WW II and the Korean war has been to the generations who survived those costly conflicts. For those of us who pursue our study of history through the construction of military models, the Vietnamese conflict flooded us with images of all of sorts of military equipment and developments. One of the most successful was the flying gun platform, dedicated to the support of ground personnel—what we have come to know as the "gunship."

Reading Tracy's review of the AMT/ERTL AC-130U, in our November issue, rekindled my interest and affection for the these amazing weapons platforms. That review, along with my long standing interest in these aircraft, has given rise to these notes. About that same time, Laurie Dick wrote an interesting article in the June, 1997 issue of *Vietnam*, in which he recounted some of the importance of the AC-130 gunships in the SEA conflict. There have

been several articles published in IPMS publications about conversions of the various C-130 kits into gunships, there hasn't been much in the way of history and documentation regarding these very specialized aircraft and their key role in the military operations of our Air Force. From this spark, I have accumulated the following, most of which concerns these lethal warships. Because of the numerous relationship to other gunships (all of which may be modeled now with a

In This Issue: USAF Gunships 1, 4-11 Prez's Notes 3 February Guest 3 Modeler's Notes 3, 12, 16-17 Painting & Finishing Models Part IV 13-15

(Cont'd on page 4)

Seattle Chapter Contacts				
	Vice President: Keith Laird	Treasurer: Norm Filer	Editor: Bob LaBouy	
Terry D. Moore 3612 201st Pl. S.W.	528 South 2nd Ave	16510 N.E. 99th	2777 70th Place S.E.	
Lynnwood, WA 98036 Ph: 425-774-6343	Kent, WA 98032 Ph: 854-9148	Redmond, WA 98052 Ph: 425-885-7213	Mercer Island, WA 98040 Ph: 206-232-7784	
111. 120 711 0010		Net: nfiler@wport.com	Net: ok3wirebob@aol.com	

Boiler Plate: This is the "official" publication of the Seattle Chapter, IPMS-USA. As such, it serves as the voice of our Chapter and depends largely upon the generous contributions of our members for articles, comments, club news, activities, any rumors or facts involving plastic scale modeling and other contributions. Our meetings are normally held each month (see the calendar below for actual dates) at the Washington Army National Guard Armory, off 15th Ave. N.W., just to the west side of Queen Anne Hill in Seattle. Our meetings begin at 10:00am and usually last for 2-3 hours. Our meetings are usually very informal and are open to any interested plastic modeler, regardless of your interests. Subscriptions come with payment of your Chapter dues of \$12.00 (to Norm Filer, our Treasurer). We also highly recommend our members join and support IPMS-USA, our national organization (dues: adult - \$19. and junior - \$9.) Any of the folks listed above will gladly assist you with further information about any aspect of our Chapter or Society.

The views and opinions expressed in this newsletter are just that, and do not constitute the official position of our Chapter or IPMS-USA. You are encouraged (no, begged) to support and submit material to the Editor for this newsletter. He will gladly work with you to see that your material is put into print and included in the newsletter, no matter what your level of computer or writing experience. Please call Bob at 232-7784; we need your input.

Meeting Dates: 1998

The IPMS/Seattle 1998 meeting schedule is as follows. To avoid conflicts with already scheduled IPMS events and National Guard activities at the armory please note that some of our meeting days fall on the third Saturday of the month. Because some of us never seem to know when we will meet, we *strongly recommend* that you cut this page our of your newsletter and paste it up next to the recycle, Mariners, Cheers reruns, Husky home game, lemming return or any other schedules you post in your house. All meetings begin at **10:00am** on meeting Saturdays.

1998

FEBRUARY 14,1998 (2nd Saturday) MARCH 14,1998 (2nd Saturday- **SPRING MEET**) APRIL 11,1998 (2nd Saturday) MAY 16,1998 (3rd Saturday) JUNE 13,1998 (2nd Saturday) JULY 18,1998 (3rd Saturday) AUGUST 15,1998 (3rd Saturday) SEPTEMBER 19,1998 (3rd Saturday)

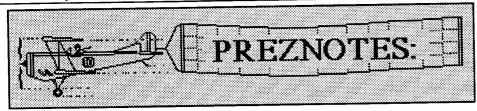
Wanted: Newsletter Editor

Have you ever dreamed about soaring to the lofty heights of being the Chapter Newsletter Editor? Are you filled with the desire to see your own creative ideas, writing and modelling interests in print? Do you enjoy the idea of assisting others and helping them with their modelling skills and interests? Do you enjoy working on your computer and want to further explore the fast paced electronic frontier of DTP? These may only be a part of your interest in the Chapter publication and they are more related areas to explore as well. Maybe you just want to see your name in print and "leave your mark" in the annuals of the Seattle IPMS Chapter?

The Seattle Chapter is actively recruiting and interested in a new Editor for this newsletter. The new Editor should be prepared to take over, beginning with the May, 1998 issue (two more monthly issues from now). You can expect to receive support and as much training as possible (or as you feel necessary) for several issues from the current Editor. Provided this Newsletter is continue in a similar format, the "volunteer" should have (or access to) a personal computer, hopefully a laser quality printer, a flatbed scanner and any type of software which will support the DTP formats needed to continue the Chapter Newsletter (this may be either a full blown DTP such as PageMaker or many current full featured word processing programs such as MS Word).

This is a fun filled, rewarding opportunity for one or possibly two members of the Chapter to join together to editor and publish this Newsletter. The pay, benefits, profit sharing and foreign travel opportunities are unbelievable. If you would like to discuss any aspects of this opportunity, you are encouraged to call or talk with Terry Moore, Norm Filer or Bob LaBouy (all our no's are listed above).

2



Greetings! No venting this month. Instead I'll write a kit review and the subject is the Tamiya G4M1 in 1/48th scale. Tamiya has certainly been hitting the proverbial nail on the head and has been releasing some very interesting subjects the last few years. One of their latest is the G4M 1 bomber known to the allies as the "Betty" and to their own aircrews as "Type 1 lighter" due to their habit of bursting into flames with only a minimum of bullet hits. To achieve the speed and range that the G4M1 had, sacrifices had to be made which included minimal armor plate and lack of self sealing fuel tanks on early versions of the aircraft. The Betty served throughout WWII, from attacks on U.S. bases in the Philippines on December 8, 1941 to carrying the surrender delegation to meet with the allies to end the war in August of 1945.

The model is molded in the light gray Tamiya plastic in multiple sealed bags. The clear parts are bagged separately. There is a large decal sheet which gives the modeler a number of options for markings. The instructions are typical Tamiya, and are well illustrated. Call outs for painting the model specify Tamiya colors only. There is a nicely detailed interior from nose to tail, save for a small section of the fuselage aft of the waist blisters(which cannot be seen too clearly anyway - unless you choose to open the waist entry hatch). Once assembled though it looks rather sparse in the large diameter fuselage and may benefit by adding some detail bits. I had a bit of difficulty assembling the fuselage halves and I actually had to use filler putty(!) on the fuselage seam. If I had touched the edges of the interior bulkheads with sandpaper, I probably would not have had any difficulty assembling the fuselage. The engine nacelles are molded separate from the wings and the join line ahead of the wing leading edge requires a small amount of putty as well. The landing gear doors are molded with the bulkhead and the landing gear itself can be painted and assembled at any stage and attached to the model. The flaps are molded as separate items and can be assembled raised or lowered. One thing to watch for are the flap hinges molded to the lower wing half. They have a tendency to break off(I found 2 floating in the bag when I opened the box). The stabilizers have a spar and require only a minimal amount of care to align them. The wing/fuselage joint is flawless with 2 spars and a locking pin to keep the wings accurately in place. All the clear parts are well done and fit

well although on my kit, the main cockpit piece had a minor flow mark on the right side. I did not use the kit decals as the particular model I did was one of the "surrender" Betties.

It looks like a Betty when assembled and when compared to photos and drawings, it appears to compare favorably. It was another Tamiya model that I had a great amount of enjoyment with and it is of a subject that 48th scale modelers have been waiting for.

Subject matter: $\star \star \star \star \star$, Kit: $\star \star \star \star 1/2$. See you at the meeting.

Теггу

Meeting Notes:

Guest Speaker at February Meeting

At our Feb. 14th meeting, we are pleased to have Lt. Col. Oleg Komarnitsky USAF Retired, as our special guest.

Col. Komarnitsky has had a varied and colorful flying career, beginning with his graduation from the US Air Force Academy in 1961. He spent most of his career flying with the USAF's Systems Command and became proficient in the T-29, T-33, T-37, T-38, T-39, F-4C, F-5, F-100, F-104, KC-135 and E-3. During his career, he had many interesting assignments, including his completion of the Air Force's Test Pilot School at Edwards AFB, Kirtland AFB and as the Flight Operations Director with the AFPRO at Boeing until his retirement in 1981. Of special interest to most of our members will be his discussion and slide presentation providing an insight into his flying with the 3rd TFW (in F-100s), from Bien Hoa AB, RSVN, in support of troops during the Vietnam conflict. In fact if you have Dave Anderton's book on the F-100, the cover photo is of Col. Komarnitsky flying an mission over Vietnam, during his 1969-70 tour in SEA. He went onto a second career, flying for Boeing, from 1981 through 1995.

Please join us in welcoming Col. Komarnitsky to the Seattle Chapter.

A/C Maintenance Write-Ups:

Discrepancy: "Evidence of hydraulic leak on right main landing gear." Corrective Action: "Evidence removed."

Modeler's Notes: A BRIEF APPRECIATION OF MODELS

by Paul A. Ludwig

Recently I began making models again thanks to Jim Schubert - after a layoff of a quarter century. During that time my interest in models was high but I devoted my spare time to other pursuits - mainly my job although I began collecting models. I married for a second time in 1994 and discovered that my wife JoAnne also likes to collect miniatures.

Whether the objects depicting a larger, real object or depicting an icon are called miniatures or models, many of us - male and female - have some association with models. Boys often begin playing with toys of cars, and girls, with dolls and as we grow we sometimes come in touch with objects in museums or books which in ancient times provided great satisfaction to their keepers and which are miniatures of larger or perhaps iconographic subjects. It has always fascinated me how the ancient Egyptians made miniatures of items to be buried with the dead that would - in theory be used to sustain afterlife.

The list of types of miniatures goes on There are models made for ship owners, models made to establish a patent, architectural models, terrain models, mannequins, automotive design models and numerous others that the average model builder may take for granted as something unrelated to the IPMS's traditional endeavors, but these, nevertheless, are models.

For me, satisfaction of seeing a model transports me - relatively speaking -to some quite distant time or place which is beyond my capability to visit the subject. And there is that factor which allows one to have the finest representational copy of his or her favorite subject close to hand if one can make a model of it or enjoy seeing another person "bring it to life." The ownership of an iconographic or miniature item brings historical perspective into one's place of residence. The importance of museums to educate cannot be overstated. and having one's own collection of carefully created objects relating to a specific bit of history of man's urge to re-create an object from real life is a pleasure for many of us.

Money often determines what one may collect and time dictates a great part of what one is able to devote to re-creating one's personal collections. I never tire of seeing li like carved wooden birds. Before last year's convention I drove north from Norfolk to Salisbury, Maryland where the great museum

(Cont'd from prior page)

reasonably high degree of accuracy), I have also included a "bit" on the whole modern USAF gunship story and their aircraft. When I started these notes, I thought I could possibly fill an entire issue of our Newsletter. Was that an error! As it is, I have cut these notes by over 1/10th to its present shape. I hope you'll find something here to spur your research and modelling interests further. Remember, this is only a scratch on the surface of what's out there for you to research further. I hope you'll note there are several articles shown in the attached bibliography, including a list of great resouces & photos available on the internet. The two articles by Col. James Humphries and Frank Vaughan, in which they review their personal insight in SEA gunships are both outstanding--read them and enjoy.

I will attempt, in this issue to bring you both an abbreviated look at the operational side of gunships, along with several references as to where you might expand your modeler's knowledge further. This article, which contains very few graphics I'm afraid, is largely a narrative one, in which you will acquire some feel for or about the gunships especially from the narratives of two authors who "were actually there." I have tried to limit the basic article to just the AC-130 Spectre gunships and have only mentioned the AC-47 and AC-119 in this article because of their importance and direct role in the development of the entire gunship program and the systems leading up to the AC-130 platform. I have specifically strayed from the other "Credible

Chase" family of fixed wing gunships which were also developed for our Southeast Asia (SEA) operations. Though these aircraft also employ a fixed side firing gun system (in most cases), that is still another story. I would refer you to Jack Ballard's very scholarly work on the Gunships for more information on those aircraft. Now onto

Spooky, Shadow, Stinger and Spectre.....

The war in Southeast Asia accelerated the development of many new concepts in aerial warfare. One of these is the side-firing U.S. Air Force gunship. This concept was first applied to the C-47 Skytrain. Modified to a gunship configuration, the C-47 was redesignated AC-47 and nicknamed "Dragonship," referred to most often as the Gunship I. [hence the original gunship emblem of the fire breathing dragon, depicted at the first of this article] The concept has since been extended

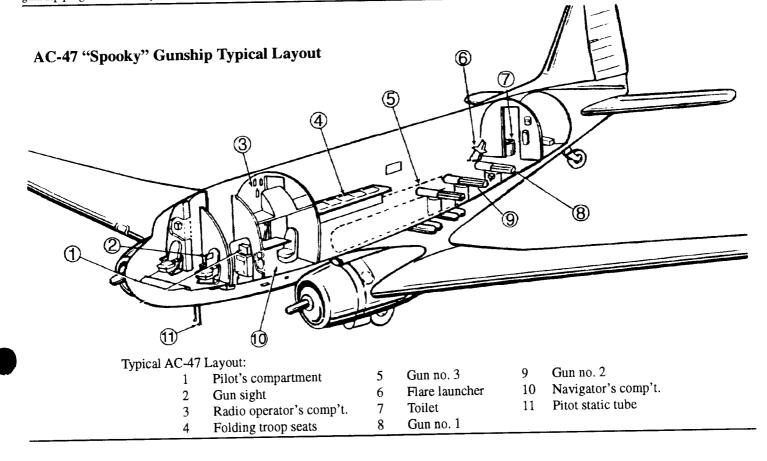
ccifically to the C-119 Packet and C-130 Hercules, Gunship II & III respectively.

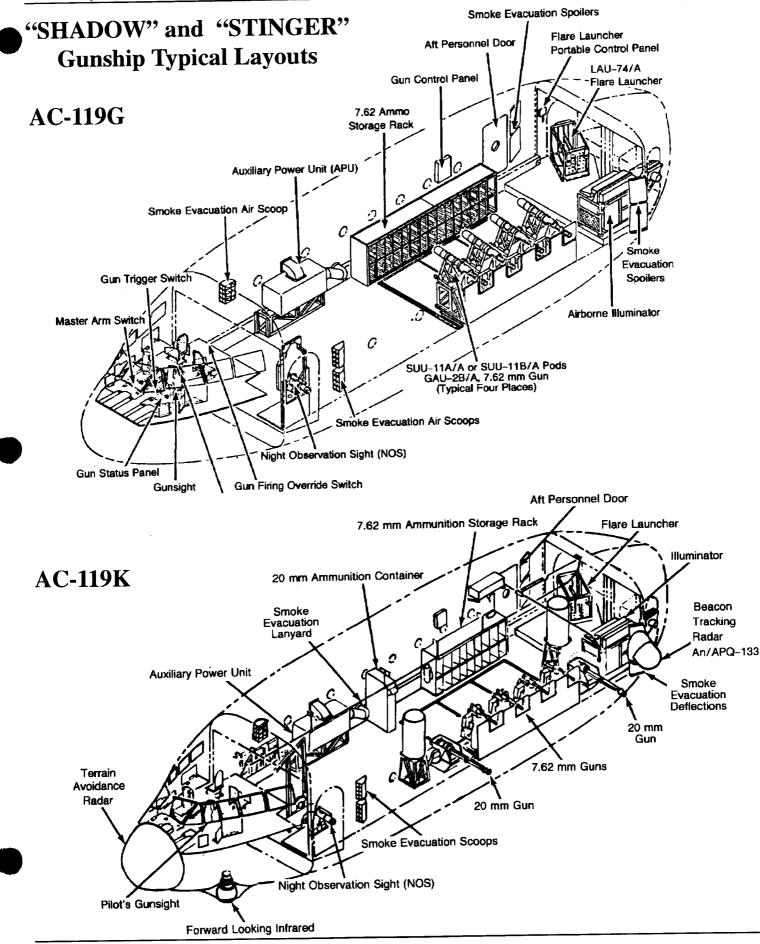
GUNSHIP EVOLUTION

The idea of making a gunship of the slow-flying C-47 was conceived by an Air Force officer who had served a tour of duty in South America. He had noted that mail and vital supplies were sometimes lowered to remote villages in a bucket tied to the end of a long rope

suspended from the cargo door of a slow-flying aircraft. As the plane circled in a steep pylon turn, the bucket tended to orbit in one spot over the ground. The officer envisioned a line of fire in place of the line of rope. Side-firing guns in the transport could be aimed by the pilot and kept bearing on a ground target as long as the plane orbited in a steep bank overhead.

In first tests of this principle, the modified C-47 used ten .30 caliber machineguns protruding from the passenger windows and cargo door on the left side of the





aircraft. In later modifications, the machineguns were replaced by three 7.62mm miniguns firing up to 18,000 rounds per minute. In addition to the miniguns, Dragonships carried flares of 2-million candlepower, with burning times of two to three minutes, used to light the target area before a strike. Subsequent testing in a converted Convair C-131 led to shipment of three conversion kits to Bien Hoa AB, South Vietnam, where two C-47s were reconfigured and tested in a combat environment. Successful tests in Southeast Asia resulted in assignment of the first operational AC-47 unit in combat in 1965. You can see this basic concept in the attached sketch, illustrating the basic gunship principle.

There were a large number of available C-47 airframes available. Known commonly by its unofficial nickname "Gooney Bird," the C-47 is the military version of the DC-3 commercial airliner and the oldest of all active Air Force aircraft. First flown in 1935, more than 10,000 C-47s were manufactured before production was stopped in 1944.

The AC-47 was originally nicknamed "Puff the Magic Dragon" by its aircrews. The name came from Vietnamese forces being supported by Dragonships. On one of the first combat missions, the guns of an AC-47 were loaded with continuous rounds of tracers. When they spewed out into the night, the Vietnamese were quick to imagine tongues of flame from a flying dragon--thus, the "Puff" nickname. The AC-47 is also unofficially referred to as "Spooky." The AC-47 was originally seen and planned for use in support of Army Special Forces camps and isolated outposts under Viet Cong attack.

Operating primarily during hours of darkness, Dragonships have broadened their operation to include close support of ground troops, and night reconnaissance missions. AC-47s are used mostly at night because of their vulnerability to ground fire. They stay above 3,000 feet, out of the range of most small arms fire.

The men who fly "Spooky" flew many different types of missions, but they receive their highest praise from the ground troops they support. Before a forward air controller got into the area, the Dragonship crew handled FAC duties. When the FAC arrived, the crew helped direct a fighter strike. An Army captain was reported to have said: "To have a Dragonship arrive on target is like having a battalion move in."

Early Development

On 15 December 1964 an entirely new weapons system was introduced into combat in Vietnam. The first AC-47 gunship took to the

air from Bien Hoa Air Base carrying an armament of three 7.62mm General Electric SUU-11A miniguns, each capable of firing 6,000 rounds per minute. The 'Spooky' was an instant success in breaking up enemy attacks on hamlets and other defensive positions, and within a year substantial numbers of rehabilitated 'Gooney Birds' were in action throughout the combat area. There were also numerous C-47 in use throughout the USAF commands during that same period.

In Sept. 1967, the USAF's prototype AC-130A gunship was sent to South Vietnam for combat tests. However, its commerciallybuilt fire control computer failed almost immediately so an urgent telegram was sent to the U.S. for a replacement. It was needed for installation in the AC-130A at Okinawa within 10 days.

Wing Commander T.C. Pinkerton, a British Royal Air Force officer on exchange duty at Wright Field, immediately designed a replacement computer, and Mr. Herman Lafferty took on the priority task of building it. He worked three days to construct it. The RAF officer then packed and shipped the computer to Okinawa without being able to test it. Upon

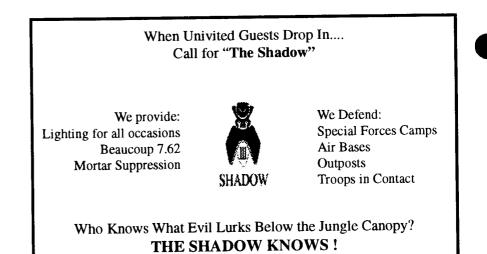
AC-47 Gunships "Spooky"

Dimensions: Span 95'; length 66'11"; height 16'11" Speed: 230 mph Ceiling: 24,000 feet Range: Beyond 2,000 miles Armament: Three 7.62mm miniguns Crew: Seven Maximum Gross Takeoff Weight: 33,000 lbs

AC-119 Gunships "Shadow"

In an effort to further increase gunship capability, C-119 Packets were recalled from Air Force (and Naval/Marine) Reserve duty. The C-119s are being modified into two versions, one carrying two reciprocating engines, and the other carrying a pair of jet booster engines in addition. Those without jets were AC-119Gs and those with jet engines as AC-119Ks. The AC-119Gs were outfitted with four miniguns, and the AC-119Ks, in addition to the four miniguns carried two 20mm cannons.

The C-119s are of 1947 vintage, but those being converted to gunships are 1952 and



its arrival in Okinawa, the unit was installed in the AC-130A and it worked perfectly. During the following two years that it was used in South East Asia (SEA), it was credited with aiding in the destruction of more than 400 enemy supply trucks. This same computer on display at the AF Musuem is the one designed and built by Wg. Cmdr. Pinkerton and Mr. Lafferty at Wright Field in 1967.

An AC-47 at Nha Trang Air Base displays the three Gatling type machine guns which make up its armament. The AC-47s were the first gunships and were called a variety of nicknames—Puff, Spooky, and Dragon ship were among the most popular. 1953 models. The Packets were in continuous use since first coming into service and were used effectively during the Korean War for airdrops and troop movements.

Dimensions: Span 109'4"; length 86'6"; height 27'6" Speed: 250 mph Ceiling: 20,000 feet Range: Beyond 2,000 miles Armament: Four 7.62mm miniguns (Also two 20mm cannons, AC-119K) Crew: Seven (AC-119G) Ten (AC-119K) Maximum Gross Takeoff Weight: * 63,000 Ibs (AC-119G) * 80,400 lbs (AC-119K)

Lockheed AC-130 "Spectre"

Dimensions

- Fuselage and tail: Length 97 ft 9 in; height 38 ft 3 in; sailplane span 52 ft 8 in; wheel track 14 ft 3 in; wheel base 32 ft 0.75 Operational weights
- Normal take-off 155,000 lb; maximum take-off 175,000 lb

Performance

Maximum speed: Maximum level speed "clean" 335 kt at 25,000 ft; cruising speed, maximum 325 kt (374 mph) at optimum altitude and economical 300 kt (345 mph) at optimum altitude

Operators: USAF only

Total manufactured by variant

AC-130A Hercules 18 conversions from C-130A and JC-130A standards

AC- 130E Hercules C-130E standard	11 conversions from
MC-130H Hercules C-130E standard	18 conversions from
AC-130H Hercules AC-130E standard	10 conversions from
MC-130H Hercules	25
	-

AC-130U Hercules 12 (A total of 84 converted, including the **"Combat Talon"** versions)

Crew: Flight and mission crew of between 9 and 11, and up to 12-16 Special Forces troopers.

AC-130A Hercules: Now a product of the Lockheed Martin Corporation since the 1994 merger of the Lockheed Corporation and Martin Marietta, the Hercules is a classic airlifter, and as such is the mainstay of the tactical air transport capability possessed by many Western air arms.

The requirement called for an aeroplane able to carry 92 infantrymen or 64 paratroops over a radius of 1,100 nm (1,267 miles) or a freight payload of 30,000 lb over radius of 950 nm (1,093 miles), the provision of two side doors for paratroop drops as well as an integral rear ramp openable in flight, the capability to operate from short and indeed unprepared airstrips, and the ability to fly at speeds down to 125 kt in operations or even lower for landings.

The first of these variants was the AC-130A Hercules, the gunship version of the C-130A. The prototype, first flown in June 1967 as a JC-130A conversion to Gunship II standard, carried armament ranged along the port side of the fuselage, and this comprised four 7.62 mm General Electric Minigun rotary six-barrel machine guns in pairs above the forward and rear sections of the port main landing gear fairing, and four 20 mm GE Vulcan rotary six-barrel cannon in pairs fore and aft of the port main landing gear unit fairing. Target acquisition and fire-control capabilities were provided by a Starlight Scope image-intensification sight and sidelooking radar feeding data to a computerized fire-control system, and the rear ramp carried a semi-automatic flare launcher and a steerable IR/UV illuminator.

The prototype was evaluated under operational conditions in Vietnam during late 1967 and in 1968, and paved the way for "production" conversions. The first seven of these were AC-130A **"Plain Jane"** aircraft with the same Gunship II armament but improved and an analog fire-control system.

Sign on revetment wall at Ubon RTAB: The FABULOUS FOUR ENGINE FIGHTERS OF THE WOLF PACK YEA, THOUGH WE FLY through the valley of the shadow of death we fear no evil for we're the meanest sons of bithches in the valley.....

The "Plain Janes" proved to be useful truck killers, but experience also revealed the need for heavier armament and improved allweather capability.

One C-130A was converted to AC-130A "Surprise Package" standard in which the rear pairs of Miniguns and Vulcans were replaced by two 40 mm Bofors cannon and the avionics suite was altered to include the "Black Crow" truck ignition sensor, low-lightlevel TV camera and a laser ranger and designator, and a very powerful searchlight.

Trials confirmed the superiority of this model, and nine more aircraft were modified to a comparable AC-130A "**Pave Pronto**" standard improved by provision for two ALQ-87 ECM pods and, and in the AC-130A "**Pave Pronto Plus**" subvariant, with two chaff/flare dispenser pods under the wings. This system also proved most effective in providing the illumination required by the laser-guided bombs dropped by McDonnell F-4Ds in support of ground troops.

<u>AC-130E Hercules:</u> This was an improved gunship produced by conversion from basic C-130E standard. The type was initially planned with the same armament and avionics as the AC-130A "Pave Pronto" with the stronger airframe, greater power and heavier weights of the C-130E to provide more payload and extended loiter time. The first conversion flew in June 1971 to an improved standard with the "Pave Aegis" armament of two 20 mm cannon forward of the port landing gear fairing, two 7.62 mm Miniguns above the forward part of the fairing, and to the rear of the fairing two 40 mm Bofors cannon of which one could be replaced by a 105 mm howitzer in the port paratroop door. This howitzer was initially located on a fixed mounting but later a trainable mounting, tied into a computer firecontrol system, was adopted.

The AC-130E differed from the C-130E in its empty weight of 72,892 lb, maximum level speed "clean" of 330 kt at 30,000 ft, cruising speed of 320 kt at altitude, endurance of 5 hours 0 minutes, and maximum rate of climb at sea level of 1,830 ft per minute.

The aircraft operated in Vietnam with the designation AC-130E **"Pave Spectre I"** and a suite of mission avionics, cockpit HUD, "Black Crow" truck ignition detection system, low-light-level TV camera and laser ranger and designator, side-looking IR sensor, and searchlight. Provision was also made for underwing carriage of two ECM pods between the engine nacelles and two chaff/ flare dispenser pods under the outer wing panels.

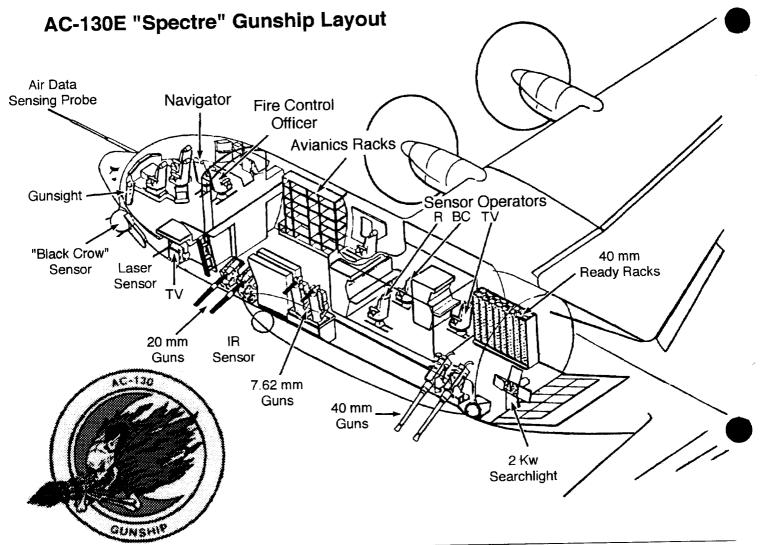
AC-130H Hercules: This designation is applied to the gunship version for the USAF. The 10 aircraft were originally AC-130Es, but were redesignated in 1973 after revision with a powerplant of four T56-A-15 turboprops. In 1978 the aircraft were each fitted with an inflight-refueling receptacle, and in the early 1990s received the SOFI (Special Operations Force Improvement) program that introduced a HUD, updated navigation and communication systems, new fire-control computers, advanced sensors, and more effective ECM.

The armament comprises two 20 mm Vulcan cannon forward of the port main landing gear fairing, provision for two 7.62 mm Miniguns above the forward part of the fairing, a 40 mm Bofors cannon in the rear part of the fairing, and a 105 mm howitzer in the port paratroop door.

<u>AC-130U Hercules:</u> This is an updated version AC-130H gunship produced as newbuild aircraft for the USAF, which requires 12 aircraft. The type was developed by Rockwell using Lockheed-supplied C-130H airframes, and first flew in December, 1990 and the first production aircraft are in service with the AF at this time. This variant has radar for genuine all-weather attack capability.

The armament can be slaved to the radar and comprises, from front to back on the port

8



side of the fuselage, one 25 mm General Electric GAU-12/U six-barrel rotary cannon with 3,000 rounds, one 40 mm Bofors gun, and one 105 mm howitzer. Protection is provided throughout the airframe using both boron & Kevlar armor.

USAF Operators of Gunships

919th SOW/711th SOS AC-130A "SPECTRE" GUNSHIPS

All of the A-model gunships were converted from JC-130As and C-130As. Some had been extensively modified and remodified before being converted to gunships. The result was that each aircraft was slightly different from its sister ships and basic technical orders. This required each crew chief, systems specialist, and aircraft mechanic to become familiar with each aircraft and it's unique personality and demanded very labor intensive support. The A and H-model Spectre gunships saw a great deal of combat with the 16th SOS at Ubon and Korat, Thailand during the Vietnam conflict. These squadrons were under the tactical command of the famous 8th TFW and for a while constituted the heaviest elements in the well known "Wolf Pack." The Amodels arrived in SEA in September of 1967 and stayed until June of 1975. Despite the fact they were few in number, they accounted for 11,000 combat sorties and 45,000 combat casulties. Along with the later-model AC-130Hs, they were the leading truck killers on the Ho Chi Min Trail and also flew combat during the 1968 Tet Offensive. It is believed that A-models, along with H-models, also flew combat missions during operation EAGLE PULL, the evacuation of Phnom Penh, Cambodia, and operation FREQUENT WIND, the evacuation of Saigon' South Vietnam. Also, the recovery of the American ship SS Mayaquez and its crew off the coast of Cambodia saw active combat by the A and H-model Spectre gunships. Furthermore, several A-model gunships performed essential "school house" training duties at the 4413th CCTS at Lockbourne AFB and Hurlburt Field, Florida (which is part of the hugh Eglin Range area).

From 1975 on, and as part of the 119th SOW, 711th SOS, A-model gunships participated in Foreign Internal Defense and counter drug deployments to Panama, Honduras, Colombia, Peru, and Ecuador. They also performed canal defense missions in Panama and saw active combat during Operation JUST CAUSE. The 711th SOS A-models were recalled during the Gulf War and saw combat over Kuwait and Iraq. At the height of DESERT STORM there were five A-model gunships in Saudi Arabia and two H-models. In addition, the A-model flew counter drug missions throughout the United States. They were also used extensively for missile launch pad and down range security for USAF and NASA rocket launches. They covered all apace shuttle launches up to and including the last Challenger mission. The Amodel gunships also participated in multiple search and rescues. Other standard gunship

(Cont'd on page 10)

AC-130E Typical Color Scheme

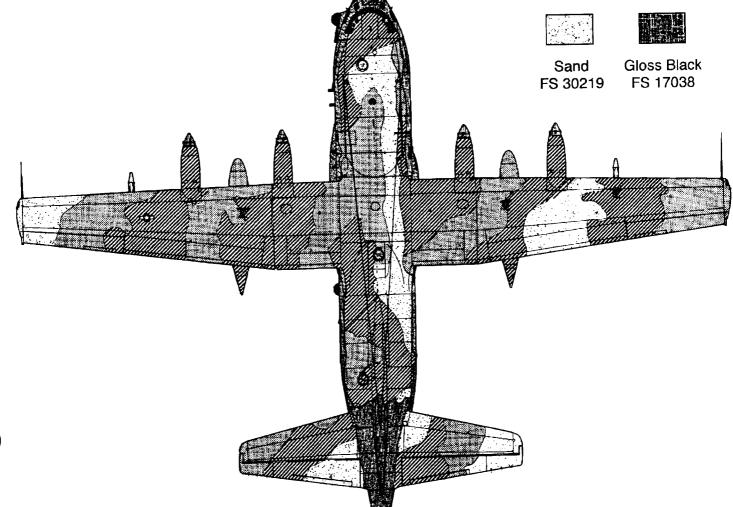
It should be noted that this scheme is shown here simply because it was representative of the AC-130 gunships through much of their combat life....and I like it. In my opinion, it is the most colorful and provides the modeler with a very attractive, yet easy-to-paint scheme. The Italeri instruction sheet provides the best detail I've seen for this general layout. Sometime during the late '70s, as gunships went through "IRAN" overhaul maintenance, the overall gray schemes began to appear. Most of these gray schemes appear to be painted in FS 36118, which has now become known simply as "gunship gray." This overall paint scheme appears to be still used throughout the gunship fleet and is in evidence on all the AC-130H and -U model gunships I've seen. From this modelers/author's opinion, again these latest tactical, usually single color schemes are horrid and an eyesore. These "schemes" (if in fact they can be called such) are contained on both the Italeri instructions and the latest AMT/ ERTL kit instruction sheets.



Green FS 34102



Dark Green FS 34079



training deployments included trips throughout the United States, Canada, North Africa, and Egypt and training with gunship customers such as Army and Navy conventional or unconventional surface forces.

The last real world "hurrah" of the Amodel gunship may very well have been Operation UPHOLD DEMOCRACY over Haiti in the Fall of 1994. It was also the last time that the H-model and A-model gunships flew along side each other in a combat environment. Almost half of the 711th SOS left their civilian Jobs and quietly deployed to Cubs as volunteers with out recall to cover the American landings and occupation of Haiti. Though the 16th SOS and the H-models were present, the first armed tactical aircraft over Port A Prince was an A-model gunship flown by a Reserve crew. The majority of the

gunship sorties and missions were flown by the 711th SOS as most of the 16th SOS H-models were already committed to Eastern Europe or Somalia. Even as UPHOLD DEMOCRACY continued and the A-models remained for months, four of the venerable warriors returned from over Haiti for retirement. Three went to the "Boneyard" and one was selected for the Hurlburt Air Park Museum. Almost all 10 A-models of the 919th SOW/711th SOS participated in UPHOLD DEMOCRACY.

Where Are They Now?

Many of you assume, from conversations I have had with some of you, there are large numbers of gunships in existence and wonder why we haven't seen lots more decals for the individual aircraft. The truth is there have never been large numbers of these highly specialized a/c and the real reason is simply one of cost-they're darn expensive. Since all gunships to date, with a very small few exceptions for the newest AC-130U Spectre II gunships have had to come from existing airframes and programs. No unit likes to see its aircraft drained off for any reason, no matter how valid and these types of special operation a/c and programs do not always enjoy servicewide popularity nor support from the other operational units/commands.

The following summary covers all known AC-130A conversions and aircraft and is based on information I gleaned from the US Air Force this past summer.

53-3129 "FIRST LADY"

Acceptance Date: 10 Mar 55 Modified to AC-130A: 26 Nov 68. Also first production C-130

Participated in Vietnam conflict with known combat by 16 SOS. Suffered battle damage 27 Mar 69 from 23 mm AAA resulting in two square foot hole blown in right elevator. On 19 Feb 70, it suffered extensive battle damage from AAA and on 16 Apr 70 it received minor battle damage. On 26 Mar 71 it received battle damage when a 37mm AAA round hit under the cockpit, damaged the hydraulic system but the crew safely recovered the plane. Assigned to 711 SOS at Duke Field, FL: 25 Jul 75. Participated in Operation UPHOLD DEMOCRACY. Retired Sept. 10, 1995. Displayed at Eglin AFB, Duke Field, USAF Armament Museum.

When Univited Guests Drop In....
Call for "The Shadow"We provide:
Lighting for all occasions
Beaucoup 7.62
Mortar SuppressionWe Defend:
Special Forces Camps
Air Bases
Outposts
Troops in Contact

Who Knows What Evil Lurks Below the Jungle Canopy? THE SHADOW KNOWS !

54-0469 "THE GRIM REAPER"

Acceptance Date: 28 Feb 57 Modified to AC-130A: 5 Jan 71

Participated in Vietnam Conflict with known combat by 16 SOS. On 3 Feb 71, first AC-130 gunship to successfully laser designate an enemy target for an F-4C fighter escort. This team destroyed a 37mm AAA gun. On 14 Apr. 71, experienced minor battle damage to left wing faring panel. Assigned to 711 SOS at Duke Field, FL: 13 Aug 75. Participated in UPHOLD DEMOCRACY. Assigned at Sheppard AFB as a maintenance trainer.

54-1628 "EXTERMINATOR"

Acceptance Date: 30 June S7 Modified to AC-130A: 2 Jan 68

Participated in Vietnam Conflict with known combat by 16 SOS. Suffered extensive battle damage on 19 Feb 70. Received minor battle damage in the number two engine and left wheel well area from 37mm AAA shrapnel on 14 April 71. Assigned to 711 SOS at Duke Field, FL: 28 July 78. Participated in UP-HOLD DEMOCRACY. Retired 10 Sept 95,

now at Davis-Monthan AFB.

54-1630 "AZRAEL-ANGEL OF DEATH"

Acceptance Date: 28 June 57 Modified to AC-130A: 10 October 68

Participated in Vietnam Conflict with known combat by 16 SOS. First Spectre to suffer battle damage when hit by 37 MM AAA (over Laos, 3 Mar 69) in right stabilizer and vertical tail. On 4 April 69, aircraft 630 was again hit by 37 mm AAA and suffered extensive damage to the nose gear area and shrapnel injuries to the flight engineer and night observation device (NOD) operator. These were the first known battle. injuries in a Spectre. The crew safely landed 630 on emergency hydraulics and two engines. On 8 Apr. 71 it suffered a 37mm direct hit in the rear ramp. The illuminator operator received minor

shrapnel wounds and burns to the face. Assigned to 711 SOS at Duke Field, FL: 4 Nov 75. Participated in Operation DESERT STORM, last aircraft of three ship raid on "Road of Death," scored final kills for A-model, last A-model to experience actual combat, most shot at (IR and radar missiles, and AAA) A-model in Desert Storm, all crew members awarded DFC for single mission. Participated in **Operation Uphold** Democracy. Retired 10 Sept 95, now on display at

USAF Museum Annex Bldg, Wright Patterson AFB, Ohio.

55-0011 "NIGHT STALKER"

Acceptance Date: 27 Nov 57 Modified to AC-130A: 11 Feb 70

Participated in Vietnam Conflict with known combat by 16 SOS. Assigned to 711 SOS at Duke Field, FL: 16 Jun 75. Participated in Operation DESERT STORM, first 919 SOW aircraft in cross border action, led three ship raid on Road of Death, scored first Amodel kills of DESERT STORM, all crew members awarded DFC for action during single mission above A1 Jahr-Basra Road. Participated in UPHOLD DEMOCRACY. Retired 10 Sept 95, now at Davis-Monthan AFB.

55-0014 "JAWS OF DEATH"

Acceptance Date: 29 Oct 57 Modified to AC-130A: 16 Oct 70 '

Participated in Vietnam Conflict with known combat by 16 SOS. Suffered minor 37mm AAA battle damage to the horizontal stabilizer on 8 Apr 71. On 14 Apr 71, it received moderate battle damage to the leading

inboard flaps when a 40mm gun exploded in the plane. One gunner was injured. On 9 May 71, the plane was hit by a 57mm shell resulting in a large hole in the left elevator and horizontal stabilizer and extensive damage to the rudder and vertical stabilizer. Assigned to 711 SOS, Duke Field, FL: 12 Oct 76. Participated in Operation JUST CAUSE. First AFRES aircraft and reservists to enter direct combat without recall by U.S. President. JUST CAUSE crew awarded AFA's President's Award for Outstanding AFRES Aircrew of Year, 1990. Participated in UPHOLD DEMOCRACY. Retired 10 Sept 95, now at Davis-Monthan AFB.

56-0509 "ULTIMATE END"

Acceptance Date: 28 Feb 57 Modified to AC-130A: 27 Jul 70

Participated in Vietnam Conflict and <u>SS Mayaquez</u> rescue with known combat by 16 SOS. Suffered battle damage on 12 Dec 70 when hit in five places by seven rounds of 37mm AAA. Received extensive battle damage to leading edge of left wing as result of a direct hit by 37mm AAA on 12 Apr 71. Assigned to Duke Field, FL: 27 Jun 75. Participated in Operations JUST CAUSE, DESERT STORM and UPHOLD DEMOC-RACY. On static display in Hurlburt Field Air Park.

56-1623 "GHOSTRIDER"

Acceptance Date: 1 Dec 57 Modified to AC-130A: 21 Dec 67

Participated in Vietnam Conflict with known combat by 16 SOS. Suffered minor battle damage on 6 May 70 and more serious damage on 25 Jan 71 when a 37mm round hit the number one engine. Assigned to 711 SOS, Duke Field, FL: 4 Nov 75. Participated in Operation DESERT STORM and UPHOLD DEMOCRACY. Retired 10 Sept 95, now at Davis-Monthan AFB.

Bibliography

Development and Employment of Fixed-Wing Gunships 1962-1972, Jack S. Ballard; Office of Air Force History (part of the many volume series, US Air Force in Southeast Asia series), U. S. Government Printing Office, Washington, D.C. 1982

The United States Air Force in Southeast Asia 1961-1973, Carl Berger, Editor; Office of Air Force History, U. S. Government Printing Office, Washington, D.C. 1977

USAF Colors and Markings in the 1990s, Dana Bell, Greenhill Books (London) and Presidio Press, Novato, CA. 1992 USAF PAO Releases on gunships

- "AC-47 Broadens Viet Attack Envelope," Aviation Week & Space Technology, April 17, 1967, pp 54-63.
- AC-47 Gunship Pilot's Handbook, T.O. 1C-47(A)D-102, USAF, U. S. Government Printing Office, Washington, D.C' Change 3, 1 Sept 1967.
- "The Flying Battleships of Vietnam," Leroy Thompson, Vietnam Magazine, Vol 1, 1988, pp 38-45.

http://www.lbjlib.utexas.edu/shwv/ articles/afgshis2.htm

Fixed wing air operations photos http://www.lbjlib.utexas.edu/shwv/ images/a_air.htm

Vietnam related resources and history great source location! http://www.lbjlib.utexas.edu/shwv/ link-faq.html

Effectiveness of "Commando Hunt III" Aircraft (in SEA)

Aircraft	Trucks Destroyed or Damaged	Sorties	Trucks Destroyed or Damaged per Sortie
AC-130 Surprise	Package 822	112	7.34
AC-130 Surprise	2,562	591	4.34
AC-123 ('Black S	,	141	3.12
AC-123 (Black) AC-119	987	435	2.27
AC-119 A-6	977	1,486	.66
A-0 A-1	1,271	2,332	.55
A-1 A-7	959	3,147	.30
A-7 F-4	1.576	6,310	.25
г-4 А-4	245	1,223	.20
A-4 Total:	9,839	15,777	.62

"Night Spectre Haunts The Ho Chi Minh Trail," LtCol Henry Zeybel, USAF(Ret), Vietnam Magazine, October, 1995, pp 38-45.

- "AC-130 Spectre Earns Its Wings," Laurie R. Dick, Vietnam Magazine, June, 1997, pp 30-36.
- Frank Vaughan's history of gunships in Vietnam (with photos) http://www.lbjlib.utexas.edu/shwv/ articles/afgs-faq.htm
- Gunships A Pictorial History of Spooky; Larry Davis, Squadron/Signal Publications, 1982.
- Air War Grenada; Stephen Harding, Pictorial histories Publishing Co; 1984.
- Col. James F. Humphries' gunship article (with photos) http://www.lbjlib.utexas.edu/shwv/ articles/afgshump.htm
- Dougherty, Richard P.'s Short History of the AC-130 Gunships http://www.lbjlib.utexas.edu/shwv/ articles/afgshis1.htm
- Dougherty, Richard P.'s History of Computers in Fixed Wing Gunships

Member Notes:

There is some sad news for our Chapter this month. Members Frank Lyso and Jack Kline learned recently that a local modeler, one many of us knew, Michael Abanshin passed away very recently. In his note, Frank Lyso remembered Michael in these words:

"Just before Christmas we had the sad and shocking news that our good friend and fellow member, Michael Abanshin, had suddenly passed away.

He was always a good friend, and we will miss the enjoyable discussions about his future releases.

He would bring line drawings, parts manuals and photographs of planes and engines. We would sit, look and talk about all this for hours.

As always, he would leave all this mass of information for us so we could copy anything of interest. Indeed, he was a very generous man and a very good friend. He will surely be missed."

All the members of the Seattle Chapter wish the best to Michael's family and friends at the terrible news of his passing.

11

<u>Last Newsletter</u>:

Yep, that's right. For those of you who have not renewed your '98 dues, <u>this will be your last Newslet-</u> <u>ter</u>. Sad to say, but about twenty of us have overlooked this year's dues. We're sorry to see you go and while you're welcome at the meetings, you'll not be receiving further copies of the Chapter's newsletter.

Wants & Disposals:

Scott Taylor, Seattle IPMS, has a large number of his kits for sale. These 421 model aircraft kits, mostly WW II 1/72nd scale kits range from the 1970s to more resent releases and cover all countries involved in WW II. He is willing to consider all offers. Please give Scott a call at: (253)839-1704, or you may email him at: sconan@juno.com



Accurate Miniatures TBF/TBD Kit <u>Parts</u>. That's all I am looking for. Anyone with a partially built kit, parts or willing to part with one cheap, please call Bob LaBouy, at 206-232-7784 or email me via the internet at "ok3wirebob@aol.com" with your price and availability. You guessed it, I screwed up on the vertical tail surfaces and would like to replace what I did with the corrected pieces, plus I need parts for conversions. Have pitty, as you can see from my modelling, I need it.

Modeler's Notes:

What to Build Next? by Bill Osborn

It's a question we've all ask ourselves over and over. We all have a hoard of kits on a shelf or in a box just waiting, and in some cases waiting and waiting to be built. Most of us have tow or three models in work at one time. But there comes a time that those are done and maybe if you're lucky, the work bench will be cleared.

Those of you who have had the misfortune to stumble through my garage and into my 8' x 12' work room know that I have a small supply of kits. So why is it so hard for me to find something to build? You'll notice I did not say start, I'm a great starter but a bad finisher. Seems like I always get hung up on something and can't get past it.

I have a very pretty Dutch ASW F27 that I started in 1976, that has been painted and ready for decals for over 20 years. The

problem is, I don't have and cannot find the decals I need. I've tried hand painting but I'm not that good. I could send away and have somebody make a custom set but I'm too cheap.

But, let's get back to the subject. You have a hole in your building program. There are so many models you want to build. Lets start by taking a kit and looking at it. It looks good in the box, the instructions show its not too hard to build. The decals and color plates are o.k., but this just isn't quite what you had in mind.

You didn't have anything in mind anyway but this kit isn't it. The next one is promising, you've wanted to do it ever since you found that great decal sheet. O.k., this is it? Parts are trimmed off the sprue and dry fit. You may even glue a few parts together. Then you notice that some of the parts are not as good as they should be or don't fit like they should. You think I'll just put this back on the shelf and find something that works better.

More boxes come out of hiding. Each one is a good kit, but each one just isn't "THE KIT!" Most are fine kits, some are so bad you wonder why you bought them. Maybe that's why some places won't let you open the boxes. If you see what's inside them you won't buy the kit.

By now desperation has set in, the itch to build has become a living thing. (well maybe not quite that bad) But, you want to build something. Or, then again, maybe you should finish one of those already started on your last pawing through your kits. We buy new kits with the thought that we will sit right down and build this award winning model as soon as we get home.

What happens? Maybe the lawn needs to be cut, the wife wants to go shopping, the kits have a ball game or maybe your just not in the mood right now (blasphemy!). So on the shelf it goes with the other two or three kits, to collect dust until you have the need to start this process all over again. Or until the end of time, which ever comes first.

INTERNET Info:

Does anyone remember that in our October "Internet Info" column, we ran an update to the IPMS/Albuquerque Scale Modeler's website address. Well, they have up and changer her again. But since this site is so unique and contains such a wealth of modeling resouces, here's the latest from those crazy guys down in Albuquerque (and Michael Benolkin, their Webmaster).

"IPMS/Albuquerque Scale Modeler's website has been updated for January 1998. As we've passed the 6000 visitor mark since May of 1997, we've strived to make our site as useful and entertaining to modeling community

as possible. We've now added a kit review library which now features the Hasegawa 1/48 Hurricane, Classic Airframes 1/48 He112B and DML 1/35 T-34/85. Look for the Tamiya 1/48 He219 Uhu review shortly. Our new contest camera (digital, one each) provides us with instant feedback on club contest results. Stop into the December contest section for a looksee. We are also building a library of our membership's best modeling works. Check it out! The Air Intelligence databases are being updated regularly now. This is the only online reference of its kind! And its FREE!!

[Ed's note: entering this one site can be very time consuming! It's great and has lots of connnecting web sites and tons of info.]

Other Interesting Sites				
The Luftwaffe Resouce Site				
http://www.tiac.net/users/srose/luftwafe/				
main.html				
The Luftwaffe Ordance site				
http://www.tiac.net/users/srose/luftwafe/				
bombs.html				
EJECT! (European Airshows, Accidents,				
Photos, etc.)				
http://www.kolibri.lr.tudelft.nl/eject/				
frames.htm?				
TACAIR Publications Air Intelligence (lists				
of kits, wants & disposals, etc.)				
http://tacair-press.com/tacair/airintel.htm				
The Southern Maine Scale Modelers Web Site				
has been updated				
http://www.int-usa.net/dfa/				
<u>Aircraft Radio Calls:</u>				
LH741: "Tower, give me a rough time				
check!"				

Tower:	"It's Tuesday, Sir."
	"Have you got enough fuel or not?"
Pilot:	"Yes."
Tower:	"Yes what?"
Pilot:	"Yes, SIR!"
Tower:	"Shamu Two Two, please state
e	stimated time of arrival.
Pilot:	"OK, let's see, I think Tuesday
v	vould be nice."
	"Delta Zulu Romeo, turn right now
a	nd report your heading."
Pilot:	"Wilco. 341, 342, 343, 344, 345"
	"You have traffic at 10 o'clock, 6
r	niles!"
Pilot:	"Give us another >hint, we have
C	ligital watches!"
Tower:	
Pilot:	"Well, I'm six foot and am sitting at
1	he front of the plane on the left hand

side"

12

Getting Paint on the Model - Materials Painting & Finishing Models- Part IV

by Ted Holowchuk

Introduction to Part 4

o refresh your memory, I am writing A about "my way" of painting & finishing models. It is not the only way nor is it even the best way (Yes it is! - Darn, I hate it when I say things like that). In this article I will attempt to explain the reasons for using the materials I use.

The Goal: Develop A Consistent System

Sorry, I couldn't resist that last bit. Kidding aside, I rely on experience and

familiarity in my system for finishing. I refer to the process of priming, painting, decaling and weathering a

model as finishing. It is more than just painting. I believe you should be comfortable and confident when using products and a finishing system. I like to use products and procedures I have experience with on all my models. This allows me to predict the outcome, making the job much easier and more satisfying. I do not change my system often and then only for a good reason. An example of such a change is that I have started to use acrylic paint on vinyl tank tracks. If you bounce around changing products and/or procedures on each project, solving a finishing problem can be a real headache. By the way, although staying with a system eliminates most problems, God knows that even when painting within a system you can still have "hard to, explain problems.". Murphy is a live-in relative of most finishers, painters and model builders.

My System

My "system of finishing" uses lacquer and enamel paints almost exclusively. I tried using water based products some time ago and found myself bouncing from one system to

another. Doing this, the glitches started to show their ugly heads. I decided to stick with one system and not try to cover both sides of the road.

I decided to stick with the lacquer and enamel paints because:

1. I am familiar with them,

2. They work well, giving good coverage with thin minimal coats,

3. They dry quickly and can be re-coated within minutes,

4. These products are compatible with each other.

5. I can use one thinner/reducer for all my paints and clear coats, eliminating the

question, "what do I use with this stuff?" 6. Lacquer thinner based paints "bite" or etch the plastic in our models, the paint sticks better and masking is not a

some bottles of color are 4-5 years old. When it is time to spray, I select the color, shake up the bottle, plug it into the airbrush and spray away. When done I recap the bottle and set it back in the rack. Sometimes a bottle of paint will dry up, at which point I dump the material, mix up a fresh batch of RTS color and set it in the paint rack. My laziness in action again! Now on to the materials that I use in my

system. 1. Lacquer thinner - DTL 876 from

Ditzler, an automotive product. This is the only thinner that I use as a reducer for all the spraying paint, clears and primers that I use. DTL 876 is a good quality thinner that can be used anytime, even in a cold or damp environment. I buy this thinner at WESCO Autobody Supply. The minimum purchase is 1 quart which costs \$8 (25 cents per oz.). A gallon will cost you \$20 (16 cents per oz.)

2. Primer - Kondar Acrylic Primer Surfacer, DZ3 Light Gray, also made by Ditzler. This material is the foundation of my finishing system. I use this primer on almost everything I paint, especially exterior or large surfaces. There are exceptions, but I will get to that later. Professional painters use primer and so do I. This primer adheres very well to almost all the materials we use in our modeling. It dries fast, builds fast, fills cracks and scratch marks, covers fillers very nicely, sands easily (when dry), can be scribed and provides a good base or foundation for our paint. This primer is also an automotive product available at WESCO Autobody Supply. Minimum quantity is one quart and is priced around \$25.00 for the quart. Now this sounds expensive but it works out to about 78 cents per oz. which is not to bad. A quart will last a

long time.

A word about using this primer; it is a very thick material and for our use it should be reduced about 4 parts thinner to 1 part

primer.

This material is the only product I use that has a shelf life once it has been mixed with

relative of most finishers"

A side note on lacquer: contrary to what I have heard and read on this subject, I have never had any lacquer paints melt or craze any plastic surface that I have worked with. I would really like to see the results of this horror story and hear how it happened. Has anyone out there seen this? If so, bring it to our meeting, I would like to see this.

Storing Paint:

I do not mix a fresh batch of paint for every project. My paint rack is full of what I call RTS (Ready To Spray) bottles of paint.

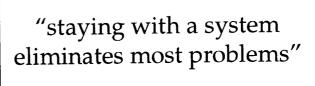
Being a pack rat, you never know when you

might need that color, right?). Incidentally,

Everything from often used colors such as interior green to seldom used colors (why do I keep these?

problem.

"Murphy is a live-in



thinner. I usually keep a thinned bottle for 4 - 6 weeks. If the mixed RTS primer does not want to dissolve into itself, looks like buttermilk in the bottle or if it sprays way too grainy, get rid of it and mix up a fresh batch.

3. **Clear Gloss** - Duracryl Clear Gloss another Ditzler automotive product. It is a water clear gloss acrylic lacquer that does not yellow with time. Like the Kondar primer, Duracryl is also very thick and has to be reduced 4 parts thinner to 1 part Duracryl. This

"Balderdash! I say"

material dries very fast, can be re-coated in minutes and when dry can be

wet or dry sanded with ease.

The manufacturer recommends you apply 3-4 wet coats within minutes. I start my clear coats with 2-3 <u>light</u> coats. This sets up and protects the color coats and will help prevent any unusual reaction. Remember Murphy? After 15-20 minutes I then re-coat with 2-3 wet coats in one evening. However, I also advise allowing sufficient dry time instead of pushing. Remember, take your time. The manufacturer also suggests spraying all coats required in one day. Well, I have re-coated previously sprayed areas with a time lapse of days, weeks or months. However, before doing that I usually sand the project and will apply the first two coats lightly.

I use Duracryl on all my models from aircraft & armor to rubbed-out auto finishes. I consider Duracryl the best clear gloss I have used. It is the base for decals, oil washes and build up of finish for a rubbed out project (autos). I also use it to build up finish over decals (more of this later) Again, this automotive product is available at WESCO Autobody Supply. The minimum quantity you can purchase is one quart which will cost about \$ 25 (78 cents per oz.). mostly I use the old standard hobby paints, bought at the hobby shop. These paints have finely ground pigments and work very well, as well as having a color selection that fits our needs. I use the following paints:

a. Floquil - Lacquer based paint. an old standard, one of my favorites.

b. Aeromaster - lacquer based paint made by Floquil.

c. Model Master - an enamel paint I like for the range of flats and military colors.

d. Humbrol - another enamel, from Britain e. Xtracolor - another

British enamel with a wide

range of colors.

Notes on particular paints

Floquil and Aeromaster both give good color intensity and coverage. Each has a recommended thinner but as I said earlier, I use the DTL 876 thinner for both. The recommended thinner to paint ratio is 15 - 25 percent thinner to 75 - 85 percent paint. Balderdash! I say, start with a 50/50 mix and reduce more if necessary. Use two or three light coats for good coverage with minimal paint buildup. This paint mixture also dries

quickly.

Modeler Master military and flat finishes are enamels that cover well with thin coats. I find the recommended thinner, a

solvent of the mineral spirit/paint thinner family, too slow drying. I use the DTL 876 with this paint and again I start with a 50/50 thinner to paint mix. I spray this paint in 2-3 light coats.

Humbrol and Xtracolor - thinned 50/ 50 with DTL 876.

Spraying both lacquer and enamel paint

mixes with 2-3 light coats allows the paint to lay out smooth and thin, to dry quickly, and does not obscure detail.

"Remember, take your time"

4. Clear Flat - Testor's Dullcoat. Surprise! For flat finish I have found that Dullcoat works best for me. It provides the sheen I like, looks good and is easy to use. Yes, the same DTL 876 lacquer thinner is used, mixed about 50/50. You can re-coat Dullcoat within minutes because it dries so quickly. Dullcoat works well over the Duracryl or over paints. It can be the final flat finish or the base for weathering (more on this later). Dullcoat can be purchased at most hobby shops for the going price.

5. Color Paints. Although I do occasionally use colored industrial lacquers, I

6. Metallic Paints

I use Floquil and some Model Master metallic paints that I thin to the same 50/50 ratio and apply in the same 2-3 light coats.

Preparing to Paint

Mixing

Sometimes improper mixing will yield poor results. The solids/ pigments in a new bottle of paint, or one that has sat around for a while can settle to the bottom and set like cement. If this happens, I open the bottle, drop a few bb's in the jar and use a stir stick to break

loose the solids and stir up the paint. I then recap the bottle, hold it with my thumb on the bottom (I have had bottle bottoms blow out) and I "shake well before using". I then reopen the bottle, check again for solids in the paint, stir and shake again as needed. Some colors are more prone to this solidifying than others.

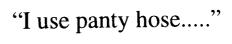
Straining

I also strain these paints when mixing a RTS (Ready To Spray) batch. Now here is the fun. I use panty hose as a strainer, It works great. I get my panty hose by — oops! I think I'll let you solve that problem yourself.

Notice how this all works together without a mess of different products and formulas. This is the paint of the finishing system I use. Compatibility; products that work together without undesirable reactions makes my system easier for me.

A note about gloss paint

I have made this all sound easy and trouble free. However, there is a chuck hole in the road that you can avoid. Guess how I know about that chuck hole? Yep, I've been in it. I have had no problem spraying gloss Duracryl



lacquer over fla and military enamels and most

gloss enamels. However I had one experience with Model Master gloss black. When I applied the clear coat to a gloss black F-104 wing the surface crazed, checked, and cracked. It was bad a reaction and I had a problem fixing it. I may have been rushing the job, but the experience was enough for me to slightly change my approach to gloss enamels. As I said I always spray the first 2 -3 coats of Duracryl clear gloss with light coats. Now, I make sure the enamel color coat is good and dry before I spray the clear gloss lacquer on with very light coats until I have built up 5-6 coats of the Duracryl. After that I still do not flood the area, but spray moderate damp/wet coats just to slow it down a bit. I have used a number of different colors of Model Master, Humbrol and Xtracolor gloss enamels with no problem - Murphy was at work again I guess.

Paints For Hand Painting

In addition to spraying the paints above, I use Floquil Polly-S water-based paint for a brush painting of details. I like the good coverage, the ease of use and cleanup at the workbench. Polly-S also dries quickly and can be clear top coated in minutes. Water-based

acrylic paints used by ceramic hobbyists are also very good for brush paints. They work like Polly-S and have a good color range. Tube acrylics are also good paints for brush painting and can be bought at art supply stores.

Artist oil colors

Are used for oil washes over the gloss lacquer finish. The wash accentuates panel

lines (more on this later). I normally use white, black and raw

"I use water-based paint for all brush painting of details"

umber. Burnt umber is also a good color and cadmium orange is a great color for rust (armor, old autos, etc.) These paints are available at art supply stores.

Odorless Paint Thinner/ Mineral Spirits

This is the solvent I use with artist oil colors. Regular paint thinner/mineral spirits has a strong, sometimes bothersome odor. The odorless thinner is much more acceptable. Also available at artist supply stores.

Abrasives I use:

Sandpaper

This can be an interesting subject because the type of sandpaper usually recommended is the black wet or dry type. The only time I use this "stuff" is when wet sanding a model that will be rubbed out (e.g. autobodies). I use a dry type sandpaper from

3M (yes I only buy the best). It is called Tri-M-Ite Fre-Cut. This type of paper

".....everything he talks about costs \$25 dollars & who can afford that?"

is available from 100 grit to 800 grit. For model work I normally use -220 -280, -320, -400 and -500 grit. This paper does not load up like the black wet or dry type. It is very easy to use, lasts longer, cuts very well and leaves a smooth surface especially when using the -400 to -500 grit. This sandpaper can be bought in single sheets at TAP Plastics and some paint supply stores. (TAP Plastics is another interesting supply house) 600 & 800 grits can be bought by ordering from WESCO at about \$25.00 per sleeve of 100 sheets.

Scotch-Brite Pads. These nylon fiber pads are available in various degrees of abrasive (grit). The best grits for our use is the gray (fine) and white (very fine) They are a fine rubbing product like steel wool that is used in conjunction with sandpaper. Scotch-Brite pads are available at WESCO and some paint supply stores. They cost about 85 cents for each 6x9 inch pad. As an aside, let me say that

me say that steel wool has been recommended by some builders. I don't like it because it breaks some bard

down, leaving metallic fibers that can be hard to get rid of.

3M Softback Sanding Sponges. This is a new product brought to my attention by John Alcorn and Bill Johnson. They are sponge pads about one quarter inch thick and very pliable. There is an abrasive material bonded to one side. They are easily cut and folded, to allow you to get into difficult areas such as wing roots. Some of the guys and myself have been using them and they work great. They come in five "grits". The best for our use are the three finest; superfine, ultrafine and microfine. I found them at WESCO Autobody Supply where they cost \$25 for about 20 pads and they only sell them by the box and they have to be ordered. They are now also available at Galaxy Hobby in Lynnwood for about \$1.50 each.

Doesn't it seem like everything I talk about costs \$25? Boy, I hope I haven't scared you off. This isn't as daunting as it seems. I know some of you are saying everything he

talks about costs \$25 dollars & who can afford that? Well, we all talk with each other, find

out who else may be interested in this system, pool your dollars and share the products. Also I would like to make an offer here, I use a lot of these paints and supplies in my business and I would be willing to provide small quantities of these items for what it costs me. Just call me or see me at the meetings.

Next time I will bore you with how I use these materials to achieve the effects I want. Sounds mysterious doesn't it. Tune in next time to hear our editor Bob say "what the heck is he doing now?"

<u>List of Suppliers:</u>

- Your Favorite Hobby Shop, Wherever!: - model paints, Dullcoat.
- WESCO Autobody Supply 12 outlets ranging from Bellingham to Tacoma with 8 stores in the Seattle area - check your phone book I purchase my supplies at WESCO in Kirkland (425) 823-5887:
 - Sandpaper 3M Tri-M-ite Fre-Cut
 - Duracryl Clear Gloss
 - Kondar Acrylic Primer Surfacer
 - DTL 876 Lacquer Thinner
 - Scotch Brite Gray or white
 - 3M Softback Sanding Sponges.
- TAP Plastics 12021 Northup Way, Bellevue (425) 861-0940: -Sandpaper 3M Tri-M-ite Fre-Cut

Galaxy Hobby

196th & Highway 99, Lynnwood, WA (425) 670-0454 -3M Softback Sanding Sponges - all Grits

Seattle Art

2108 Western Ave Seattle (206) 625-0711

Daniel Smith Art Supplies 4150 First Ave S (206) 223-9599



Editor's note: A big "THANKS" to Ted for his continued efforts to share his modeling skills with the rest of us. This is, as you can see, his fourth article in this series. There are thoughts, suggestions and techniques in this (and the prior notes as well) which some of us have struggled with for many vears. Ted's "sharing" is worth more than you would acquire on your own throughout many years of modeling--at least in this editor's opinion. I hope everyone is reading and picking up as much as I am? (I know some of you wags are saying...'he really needs it too!')

This month's article was edited and helped into its final form by Brian Cahill.

Thanks to both of you guys!

(Paul Ludwig's Note from page 3) there holds the world's finest bird carvings. Until one sees a carved and painted wooden feather next to the real one and can't say which is which, one might miss the loving hours spent by the carver working in that type of modeling. Gerald Wingrove's car models never fail to entice me (but few can afford one).

My first touch with miniatures came when my parents took me to the Ford Motor Company's Rotunda (now burned down) in Detroit where the "world of the future" as envisioned in the 1940s was built in miniature behind a glass case and all the moving planes, cars, ships, trains and the lighted objects entranced me.

I appreciate models. I would ask, in closing, that if readers of this article will write to me about models of historical, religious, ethnic, manufacturing, dynastic and advertising interest, it will help me prepare a longer article that I hope to publish some day.

REBOXING - THE TREND OF THE NINETIES

by Robert Allen

It used to be that if you bought an Airfix kit, you could be pretty sure that what was in the box was originally issued by Airfix. The same was true with buying one from Monogram, or Revell. It's not that way anymore. There are few things in modeling more frustrating than accidentally buying a kit you already have, dressed up in another company's box. In the multi-national nineties, this happens frequently. While I don't pretend to know the complete picture, it may be helpful to know some of the main offenders of repackaging other manufacturer's kits, and where the originals came from. I know mainly aircraft kits, so armor and ship modelers must excuse me. I tend to be more familiar with 1/72 scale, so all airplanes cited that don't mention a scale are 1/72.

Airfix and Heller were originally separate companies. For a time in the 1980s, both were owned by Humbrol. At that time, their kits started to be crossboxed; the two companies are now individually owned, but the practice continues. In some cases, Airfix and Heller kits of an aircraft type are the same basic molds, with modifications as needed. For example, the Airfix single-seat MiG-29 and the Heller two-seater are variations of the same mold. Airfix took the Heller Gloster Javelin T.3, and modified it into a Javelin FAW.9. All well and good. But their WW2 fighters continue to be crossboxed for little apparent reason. Heller's current P-40E Kittyhawk is actually the Airfix P-40E reboxed, though Heller's own Kittyhawk is much better.

Perhaps the most convoluted reboxing is the Airfix Battle of Britain 50th Anniversary Hurricane Mk.IIc. This is the Heller Mk.IIc, with decals to represent a Mk.I. You even have to cut off the cannons to make it look like a Mk.I - just like the Battle of Britain Memorial Flight had to do! All this despite the fact that Airfix has a perfectly good Mk.I in its catalogue, though to be fair the Mk.I and Mk.II nose contours are a bit different.

Airfix, and especially Heller, tend to get reboxed by many other firms. Heller molds have shown up in SMER (all their 1/72 kits), Revell, Blue Ribbon, and Encore packaging. Heller has also licensed its kits to be used in "upgrade" packages along with (pick one or more) white metal parts, vacuform canopies, photo-etched parts, and new decals, by SMER, AeroMaster (F-84G, Tempest Mk.V,) and Tasman (DH.89A Dragon Rapide). Both Airfix and Heller were leasing their kits to American companies as long ago as the 1970s, with MPC and Aurora, respectively.

It's well-known that Revell and Monogram are now one company, and that their kits are issued under the combined name, as well as the Pro Modeler moniker. Yet even some of the older Monogram kits aren't what they seem. Some, like their 1/48 F-lllA, are actually old Aurora kits, with some improvements and additions to the molds. Deep down, they're still Aurora kits. Some Aurora kits of WW1 aircraft have shown up in Monogram Germany boxes.

This brings us to the biggest crap shoot of all - Revell Germany. No company on the face of the globe does the reboxing thing as deftly as Revell Germany. You really have no idea what you're going to get. Older Revell and Monogram molds are the tip of the iceberg. Matchbox molds are now owned by the firm, so Matchbox kits have shown up in Revell hores (SAAB L29, Chinock) and vice-versa (Fiat CR.42, Polikarpov I-16). Other Revell Germany kits were originally issued by Heller (T-6G, Vampire,) PM (Ta 183,) Emhar (North American Fury,) Vista (Fulmar, P-40K,) and Frog. Frog kits of German aircraft (Do 17Z, Ta 152, etc.) have been issued by Revell since the late 1970s, when most of Frog's molds were sold to the Soviet Union. The Soviets refused to take any kits of Nazi aircraft, so these ended up with Revell, who have sporadically marketed them ever since, recently as Matchbox kits. Some old Frog molds have even turned up in Japan, under the Tsukuda name.

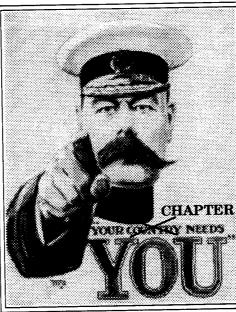
To bring things full circle, Revell has recently begun to issue many of the Frog molds that went to the Soviets, such as the Skua, Canberra, and Blenheim Mk.I. They have improved the kits by cleaning up the molds, removing much of the flash so common to Eastern bloc kits. The saga of these Frog molds deserves its own article; they are the most reboxed kits in history, coming out under the Novo, InTech, ModelCraft, Chematic, Cooperativa, and a thousand other names. Safe to say, if it's Eastern European, and an obscure British airplane, it's probably a Frog mold. Revell Germany has also reissued kits originally made in the Soviet Union and Eastern Europe, such as its Ilyushin 11-4.

Revell Germany has recently introduced an excellent new series of 1/72 WW2 fighters They are being marketed in the USA under the Pro Modeler name at over twice the cost of what the kits retail for in Europe!

Italeri is another company with strong links to the ex-USSR. Many of their Soviet and German WW2 aircraft kits are reboxed Zvezda molds. Their MiG-3 is the horrible French Cap Croix du Sud kit. They also distribute DML molds in Europe as Italeri kits, though I haven't seen them here. Italeri also sometimes swaps molds with Revell. Many, if not all, of Supermodel's single-seat Italian

Editor Needed:

As I suspect some of you are aware, we need a new Editor to take over this "ship of state." The forward watch has reported 'ice bergs dead ahead' and our Chapter Newsletter will be following the Titanic in its course if some member doesn't step up to the plate. The Chapter should be strong enough that there are more than one or two members who carry on the duties of the group as a whole (or hole). As Lord Kitchener declared (sort of) "your chapter needs you."



fighters were issued as Italaerei kits when the company traded under that name. Italeri have also seen many of their kits reboxed as Testors kits. Testors has sent some things the other way; the 1/48 Italeri Westland Lysander is a Hawk mold from the Testors archives.

Testors has had licensing agreements with many other companies around the world. They take other kits, give them nice decals, and write long-winded instruction sheets. Many of their kits are doddering Hawk molds from the 1950s and 1960s; these range in quality from horrible (T-6, SBD, Supermarine Swift,) to fairly horrible (1/48 T33, 1/48 Bearcat). In fairness, many of the subjects, such as their Golden Age air racers, are unique. Testors has had licensing agreements with Italeri, Heller, Fujimi, and currently Italeri again. Sometimes they have deftly switched from one supplier to another; their reboxings of the Heller and Fujimi F-86 Sabres had the same decal sheets!

Lindberg has an entire archive of the worst kits ever made to draw upon, but they also use others' work. They have put out several of the "battle damaged" kits originally done by ITC, and they've also released the ancient Merit/Pyro line of 1/48 British between-the-wars fighters. Despite their age, these are probably the best aircraft kits ever released under the Lindberg name. AMT/ ERTL owns all of the Italian ESCI molds; how many of them we'll ever see again remains a matter for debate.

A couple of American companies specialize in reboxing kits, with new decals. Glencoe has released a couple of original 1/48 WW1 fighters, but the vast majority of their kits are older molds from obscure '50s and '60s firms such as ITC. Encore, an arm of the Squadron/Signal empire, actually tells you on the box who originated the kit. Many come from Heller molds (produced in Argentina) or from several firms in the former Eastern bloc. They have recently boxed the ICM Yak-9 and Tu-2 kits at very reasonable prices. They have also attempted to upgrade the Cap Croix de Sud MiG-3 by enclosing a

bag of True Details resin parts to replace the more inaccurate kit ones. It's still an awful kit! Encore's main attraction is excellent decal sheets; their Heller Gloster Gladiator reissue had six different counties' markings to choose from.

I'm not as familiar with the provenance of Japanese kits, but most of the major firms seem to produce models of their own design with a few exceptions. Even Hasegawa, probably the finest model company in the world, has a few skeletons in their closet. Some of their WW2 Japanese aircraft, such as the Nakajima Ki-27 and Mitsubishi Ki-51, were originally Mania kits. Their 1/48 Italian fighters, such as the Fiat G.50, are also from borrowed molds. Hasegawa once had a licensing agreement with Frog, but this worked mainly in the other direction. The only Hasegawa kit that could be an old Frog product is the BAC Lightning, but it certainly builds like a Hasegawa model. Can anyone shed light on this? Frog, by the way, was an early leader in the licensing business, doing deals with Air Lines and AMT in the USA, in addition to Hasegawa.

Arii is the Japanese company that most often recycles other manufacturer's kits, notably Otaki's line of 1/48 WW2 fighters (some of which have also shown up in AMT and Matchbox boxes,) and 1/72 L&S kits such as the Mitsubishi G3M and Ki-46.

Up to now, we've been looking at companies that have acquired other people's molds in presumably legitimate ways. Some companies have made unauthorized copies of kits, changing the sprues around, but making copies nonetheless. Hasegawa was so worried about this practice that they put copyright warnings on their kits around the turn of the decade. Korean moldmakers seemed to be in the forefront; perhaps Korean copyright law is more lax than in other countries. Ace and Idea bootlegged many kits, badly, in the late 1980s. These included not only Hasegawa molds, but also such howlers as the old Fujimi 1/72 F6F Hellcat, and the Airfix Yak-9D. If you're going to copy a kit, you may as well make it a decent one. Hobbycraft also ran off what seemed to be copies of other models, as well as making some fine kits of their own design. Most Hobbycraft kits, and all the recent ones, are originals, but some older ones, such as the EA-6B Prowler, and SEPECAT Jaguar, are suspiciously close to previously released kits.

Minicraft has had licensing agreements with Hasegawa and Academy. After their licensing agreement with Hasegawa expired in the mid-80s, they issued several Academy kits, such as the MiG-21F and F-104, which were new Korean molds that followed the Hasegawa kits part for part, even to the extent of using the same drawings for the instruction sheet! Old Frog kits were followed by Minicraft/Academy when creating their F4F, P-40B, and TBF kits. These aren't exact copies, but many of the inaccuracies that were present in the Frog kits are reproduced in the Minicraft ones. Their Sopwith Camel and SPAD S.XIII were "inspired" by the ESCI kits, which trace their ancestry back through many firms to Eldon in the 1960s. To add insult to injury, many consider the Eldon kits to be knock-offs of Revell's WW1 aircraft models. As with Hobbycraft, Minicraft/Academy kits of the past several years have been original, often excellent, kits. The blatant copying of kits peaked in the late '80s, and has receded since. Minicraft and Academy have parted ways recently. It will be interesting to see what happens next.

Reboxing has a purpose, keeping kits in circulation that the parent company may have sent to the vaults. But it would be nice to know what's in there before you buy...

COMPETITION AND AMS by Ned Shaw IPMS #1798

Advance Modeler's Syndrome (AMS) is strongly enhanced by competition as we modelers practice it. Where athletes, business people and others do their contesting personally on playing fields and in the "rat race", we work away in solitary places. Satisfaction comes from our finished models meeting our own standards of what the model represents. Then comes the siren call to compare them with others -- COMPETITION, and that means judging, to the judges standards. To try to reach those standards one puts more time, skill, research, tools, equipment, after market decals and modifications into the model, hence, AMS. When these efforts receive no recognition (winning something) the tension spiral tightens with the next model - more AMS. If only the thrill of a win balanced the dull feelings of defeats. Not winning means, all too often, no feedback, no idea of what is wrong with ones masterpiece. What did the judges see. of not see? Even winners get little idea of what made their entry pleasing to a critical eye.

So, what's one to do? Abandon competition and go back to building for enjoyment? the fun of it? Not submit to judging? It's tempting.

Or, try to influence competition and make it more positive?

Our contests have too many entries for judges to take more than a very quick look at each one in their class. Could an elimination round be done? Judges do it anyway. But simply set the top 4 or 5 to one side in a group. For the rest give each a short note of a plus(es) and minus(es). The for the top group, hold a short training session on why they are better liked and right then award trophies, ribbons etc. This approach might require score sheets with points for various factors (accuracy, finish details, perhaps even a "sows ear" for turning a terrible kit into a finished jewel).

AMS - building in more but enjoying it less?

PS I hesitate to mention an additional category "Built for the fun of it" No trophies, no ribbons just participation.

Technical Translations:

- A NUMBER OF DIFFERENT AP-PROACHES ARE BEING TESTED = We are still clueless.
- MAJOR TECHNOLOGICAL BREAK-THROUGH = It works only so-so, but it looks very hi-tech.

Seattle Chapter IPMS-USA Newsletter Contest Notes:

Contest Comments by Andrew Birkbeck

Have you ever found yourself at a model contest, carefully scrutinizing your favorite categories of models, and picking, after exhaustive study, your vote for First, Second, and Third Places? Only to discover, at the end of the day, that the actual contest judges have picked the winners in a different order, or horror of horrors, even going so far as to miss out one or more of your picks!! And you walk away, muttering that they must have been "bought off", blind, or just plain brain-dead.

Well, it happens to me all the time. Yet being a judge myself at many contests, I can tell you that I am not a taker of bribes, nor blind (at least when I'm wearing my bifocals), nor brain-dead, although this latter is constantly debated amongst those closest to me. No, the reason you and the judges often are at odds over winners is not a deep dark secret, but simply human nature at work, which I will now delve into in greater detail.

Firstly, let us look at the judges. Who exactly are they? Well, an honest look will tell you they are for the most part, just like you and me: modelers of varying ages, interests, and skill levels. And full of all the various quirks that make us human. They are also for the most part, under a terrible time constraint when judging a show. Since so few of us want the unenviable task of judging at such shows, there is ALWAYS a shortage of judges.

All shows have a shortage of judges. And many shows, especially the smaller ones, also suffer from a shortage of quality judges, especially quality head judges. For it is the quality of the head judges that makes a big difference in the quality of the overall judging. At two local Seattle shows, our own IPMS Seattle show, and the Museum of Flightshow, the quality of head judges has been quite high the past few years. The gentlemen responsible for this post have taken a great deal of time and care to make sure they have a good roster of judges, and that these judges are good at what they do. A judges handbook has been drawn up, and this is discussed among the judges at a Judges Meeting prior to the commencement of model judging, this meeting lasting an hour. Every attempt is made to make sure that all the judges are looking for the same qualities in the models, and awarding similar "points" for the same areas of model building and finishing. Often model contests are NOT judged this way, but instead employ the "seat of the pants" approach, with judges being lined up minutes before the judging begins, with no time to examine who exactly is doing the judging. No wonder some of these shows come up with very interesting results!

One of the biggest differences between our own choices about winners, and those of the judges, has to do with time pressures. When I am not an official judge at a contest, I personally only "pre judge" my favorite categories, maybe two or three groups that I am particularlyinterested in. I have plenty of time to do this in, starting the moment I arrive at a show (usually within an hour of it opening), and going well into the afternoon, say three or more hours. This allows me to very carefully examine each and every model in the category, and also come back numerous times throughout the day to re-examine the best of the bunch to see if I missed anything the first time through. Unfortunately, the judges have no such time luxury. The fewer the judges, the less time is spent examining each category. The less time spent, the more likelihood that the judges will miss something, even a "glaring" error that you spotted with all your extra time. The less experienced the judge, the greater the likelihood that he will miss things. If taking ones time is critical to building and finishing a good model, then it is equally true for judging a large category of models. Unfortunately, time is never a luxury judges have at model contests.

Another major area of debate among judges, is the decision whether or not to award points more for getting the so-called "basics" right, or for awarding points for adding extra details. Frankly, I am one for "the basics", and either by luck or design, get myself onto teams of judges who believe as I do. The local head judges from the two Seattle clubs that I belong to also feel this way, and it is emphasized that this is what we should be looking for, and awarding points for, when we judge our local shows. However, it is NOT what everyone looks for, some believing that extra points should be award for "going the extra mile" on a model, even at the expense of messing up some of the basics. You can argue the merits of each side until you are blue in the face, but it is a fact that some modelers will award a First to someone who superdetails the cockpit, but has glaring seams unfilled all over the place, while other modelers wouldn't give the same model a second glance. Another reason for why you and the judges might disagree.

Also remember that within the judging teams themselves, there is often disagreement. I recently helped judge a contest where two of the four judges picked model "A" as clearly first, whereas the other two judges were equally adamant that model "C" was First, and "A" was third. Model "B" was unanimously Second. Often times the judges then haggle among themselves, and a compromise has to be worked out where Model "B" ends up placing First, "C" is Second, and "A" is Third, or even a fourth model is brought into the calculations, and "C" is eliminated altogether. Rarely in my experience are the judges in unanimous agreement the first run through a category. Yet like the casual observer, they all looked at the same models, but when the information was processed through their various brains, the results ended up different. Which leads us to the next area of discussion, that of judges' bias.

Anyone who says they aren't biased really hasn't examined themselves carefully in a mirror. We all have our biases, otherwise we would all drive the same car, eat the same breakfast cereal, shop at the same stores, build in the same scale, and the same subject matter. We all have our favorite model manufacturer, modelling magazine, paint brand. All this is called "bias", and is not a distasteful word, but simply a fact of life. All our decisions have been arrived at by taking the sum total of our life experience, and filtering it, and coming up with our decisions on which paint we like, and which magazine we like best to read. The same is true for when we observe models on a contest table. As mentioned above, one bias is which is "best", getting the basics right, or adding extra detail. But there are other biases, some are defensible, others I would argue are not. Some of us rank the Supermarine Spitfire as the greatest aircraft ever designed, while others favor the P-51 Mustang, and yet others, the Fw 190D. This directly affects the outcome of a model contest when you have a very large category of first rate models, such as often occurs in the 1/72nd and 1/48th single engine/ prop categories. There seems to be a great talent pool of modelers building in these two scales, and these particular aircraft subjects. Often, the top five or more of the models in such a category are agreed to be "superb". I guarantee that if you are looking over such a category, and your favorite subject is one of those "top five", that in your mind, it is the winner. Everything on the model is flawless, maybe even a little extra detail has been added, and to top it all off, IT'S A FW 190D, your favorite! Simple: It's FIRST. Unfortunately, the guy next to you is looking at exactly the same "Top Five", but the apple of his eye is that gorgeous Dewoitine D.520. Sure the Fw 190D is "nice", but just LOOK at the D.520!..

This realm of modeller bias makes itself felt even more, when it is time to pick BEST IN SHOW, both within the same category of model, and for the show as a whole. In the former case, you might have a 1/200th scale civil airliner model up against a 1/32nd jet, which in turn is matched against a 1/72nd multi-engined bomber, against a 1/48th WWI German triplane. Some guys only have eyes for jets, so they don't look more than once at the bomber or triplane. Others have a big sof spot for "daring young men in their flying machines", and expound on the difficulties of rigging models, etc., etc. (despite the fact that the Fokker DR.1 barely has any rigging). Things get even worse when it comes to

picking BEST IN SHOW, all categories. For it is here that our biases really come to the fore, since most modelers build to a given, often ridged scale in only one category. I am lucky, in that I like to build armor and aircraft, and in multiple scales. But even I find it difficult to get excited about a Starship Enterprise model, or a 54mm Napoleonic Republican Guard figure. But that SPITFIRE over there, or that KING TIGER tank, well that's another story. This is why if you randomly pick ten shows you have been to over the past few years, you will find that in most cases, overall Best In Show will have been an airplane model. For the simple reason that the vast majority of modelers going to these shows (check the number of entries per category and you'll see) are airplane guys. There are exceptions naturally, but I bet these non aircraft winners where so far and away the best at the show, that even the natural biases of the modelers (and judges) was overcome in these cases.

Another area of bias, and one that is totally unacceptable to me, but nonetheless exists, is a bias AGAINST something, and in particular, AGAINST a given product or method of modeling. For example, there are those "against" weathered models, no matter how appropriate weathering is to the subject at hand. Examples are of WW2 aircraft in the Pacific, where the exterior paintwork of aircraft took a beating in the heat and humidity. Or of armored vehicles under similarly harsh conditions in the North African campaigns of WW2. I would expect such vehicles and aircraft to show signs of heavy weathering, but to eliminate such a model from contention because it was "weathered" is insane. Yet I have heard such comments as "well, the winner we felt was nice and clean" etc. from Judges, i.e. we aren't in favor of "weathered models".

And then there is the bias against a given manufacturer, such as was heard from one judge, "when I see a modeller has used Verlinden parts, I immediately overlook the entry". Or more generally, "anyone who uses aftermarket parts isn't a "real" modeller so I don't bother to consider their model, no matter how good it might look". And finally, there is the old bias against a given builder, along the lines that "old Bill Smith built this one, you can tell from the style". "Since he won at the Yakima Show, let's give the award to someone else this time around". I would argue that there are a good number of IPMS Seattle modelers who have a given "style" to their models, and without looking at the entry card, many of us could pick out which models on the contest table they had built. It therefore would be easy for someone with such a bias to work out who the builder was, and if you are only "pretty sure", well, just turn the entry card over when no one is looking.

Yet another difficulty in judging models

is when one has a great knowledge of one particular subject, but not others. The so-called "Expert" problem. What happens here is that one of the judges is, or thinks he is, an "expert" on a given subject. Within the model category under consideration, there is one model from the "expert's" field of knowledge, say the Hawker Hurricane. Turns out "Mr. Expert" has been building nothing but Hurricane models for the past 25 years, and has built every kit, in every scale, ever produced, ten times each. He has more knowledge of the Hurricane than Sydney Camm, and his fellow judges know this. Consequently when the judges look at the category with the Hurricane in it, an unusually long time is spent looking over the Hurricane, compared with all the other models in the group. The "Expert" wants to check out carefully how well the builder has done with a model he knows so well. Now this can help or hinder the Hurricane model in its quest to place First. If the builder of the Hurricane did a very nice job, then "Mr. Expert" will impress his fellow judges by tossing accolades in the direction of this model, pointing out how the builder fixed this or that flaw on the kit, redid the whatsit, and bored out the thingamajigs. He even wired the whatsimadoddles, to scale no less!! "Well, gentlemen, I think you will agree, this builder has done a marvelous job on his model, and deserves First Place". Problems arise of course, when no one notices (due to lack of "experts" on the panel of judges), that the P-51D, P-47D and Yak 3 also in the same category, also were built by modelers who "knew their stuff", and were equally, and authentically, well presented. Since so much time was spent looking over the Hurricane, with an "expert" to point out the builder's fine craftsmanship, the other models were hastily looked over, to find Second and Third Place.

The opposite of this "expert" bias, is when the model being picked to death ISN'T up to par. "Numerous" faults are found after a lengthy examination, faults that "only an expert" would notice. Unfortunately, no one noticed that all the other models under consideration also had various great or small faults. The reason for missing these being a combination of less time being spent examining the other models (due to so much time being spent on the "expert's" Hurricane), and the fact that no one on the team knew much about the subjects under consideration, so equally glaring faults such as lead to the Hurricane being "eliminated" went unnoticed.

The above then, are some, but by no means all of the reasons you and "The Judges" may disagree at a contest. Quite a checklist. And quite understandable, I would say. But in the heat of the "He (often "I") was robbed" outbursts, most likely forgotten.

And so, what to do? The answer is really rather simple, I think. First, don't pay

too much attention to the results of contests. I strongly suggest that you enter your best work, but NOT to win ribbons or plaques, but simply to allow others to admire your work. How can one really get upset over the results of a contest, when what actually determined the outcome was a series of human biases, a bunch of compromises amongst the judges, and the fact that a "faster gun" did, or did not, turn up to compete. I have seen a model go from not placing at one show, to winning "Best In Show" at another. The model certainly hadn't changed between shows. What changed were the judges, and what the model came up against in terms of "competition". This will always happen.

Second, I would encourage all those who have ever had a mental "disagreement" with a contest's results, to realize that you can easily help "fix" this situation, by volunteering to be a judge yourself. The more judges a contest has, the more the judges are given time to carefully look over each individual entry. And having read this masterly article on what actually happens at contests, you will know all about such matters, and know to watch out for them in yourself as you go about judging! That way, all will be perfect, and I can rest more peacefully in my bed at night!

RECON VII News:

IPMS Region VII Recon Show

May 9, 1998 Selah Civic Center

Registration:	9:00am-1:00pm
Judging:	1:00pm-4:00pm
Awards:	4:30pm

Entry fee: 5.00 (w/5 models)

Hosted by IPMS/Yakima Model Makers

For details, contest categories and rules, please contact:

Stu Alvord509-697-7914Rich Hoard509-965-6913Jim Green509-965-0553

Newsletter Notes and Editor's comments:

As you can see from this issue, there are a few more changes in the Chapter's Newsletter. Allow me to bring you up to date on a few of the most important.

New Editor--Robert Allen. Just as I was putting this issue to bed/press, at our January meeting, Robert volunteered to take on the Editor's job for the next period. Congratulations and thanks Robert! This is a rewarding and fun job.

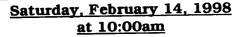
But, no member should be expected to have to handle a job for more than a year or so. Hint, hint for those of us who belong, come to the meetings and take what's provided at our meetings for granted. Stop and think about the seemingly simple task of just setting up the room, cleaning up after the meeting and restoring the room(s) to their normal configuration. All too often, we leave this task to Terry or just to "somebody else." In this member's opinion, this is an aspect of our club life which speaks poorly of us as a group and saddles the few who do the work for the rest of us. It also tends to burn out those who contribute to the club on a regular basis.

While Robert and I have just started to talk about the editor's duties, one of the areas every member could be much more helpful is in providing the Editor with more input. There are a few folks who get something each month and some who contribute absolutely nothing. I know I'm preaching again. But as I watched the "feeding frenzy" at our last meeting vendors tables, I am again amazed that with all that is bought, almost no one enjoys, dislikes or has any opinions about what you've just laid out good money for? That's the impression I get when I consider all the reviewer notes I receive.

New Mailing Procedures. As you can see from this issue, we are attempting improve several things with this issue. Thanks entirely to the efforts of Norm Filer, who located some inexpensive envelopes, which we are using for this mailing of the February Newsletter. This is a great benefit for several reasons. First, several members over the last two issues received no Newsletter or, just the cover sheet. This hopefully will confuse and inhibit the post office shredding program. Let us know how your issue arrives? It greatly simplifies Norm's portion of the task in that he doesn't have to fold this critter, which is sometimes a chore due to its size. Some folks just like their Newsletter flat. Lastly, we hope it may allow another page or two into the Newsletter without increasing our existing first class postage rate. Not that we striving for increased size, but sometimes an issue will be a bit larger (or smaller) due to the contributions (....I hope at least). Most importantly, this is another example of where a member (i.e. Norm) is working to assist all of you and to see that you benefit and hopefully, improve the overall quality of the Seattle Chapter Newsletter.

Thanks to both Norm and Robert. Every little bit helps and your contributions haven't escaped unnoticed. I am very proud of our Newsletter.

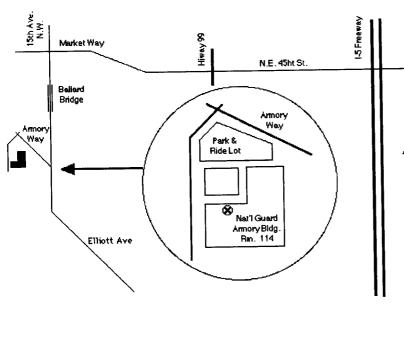




National Guard Armory Room 114 1601 West Armory Way Seattle

Directions: From North or Southbound 1-5, take the N.E. 45th St. exit. Drive West on 45th, crossing under Highway 99 (or Aurora Ave North) toward N.W. Market St. in the Ballard district. Continue West on Market St. toward 15th Ave. N.W. Turn left (south) onto 15th Ave. N.W. and drive across the Ballard Bridge until you reach Armory Way (just as you see the Animal Shelter). Watch for signs. You should park in the Metro Park & Ride Lot.

If coming from South Seattle, take Highway 99 onto the Alaska Way viaduct to Western Ave. Follow Western Ave. north to Elliott Ave. until it turns into 15th Ave N.W., then to the Armory Way turnoff.



 $\frac{1}{20}$