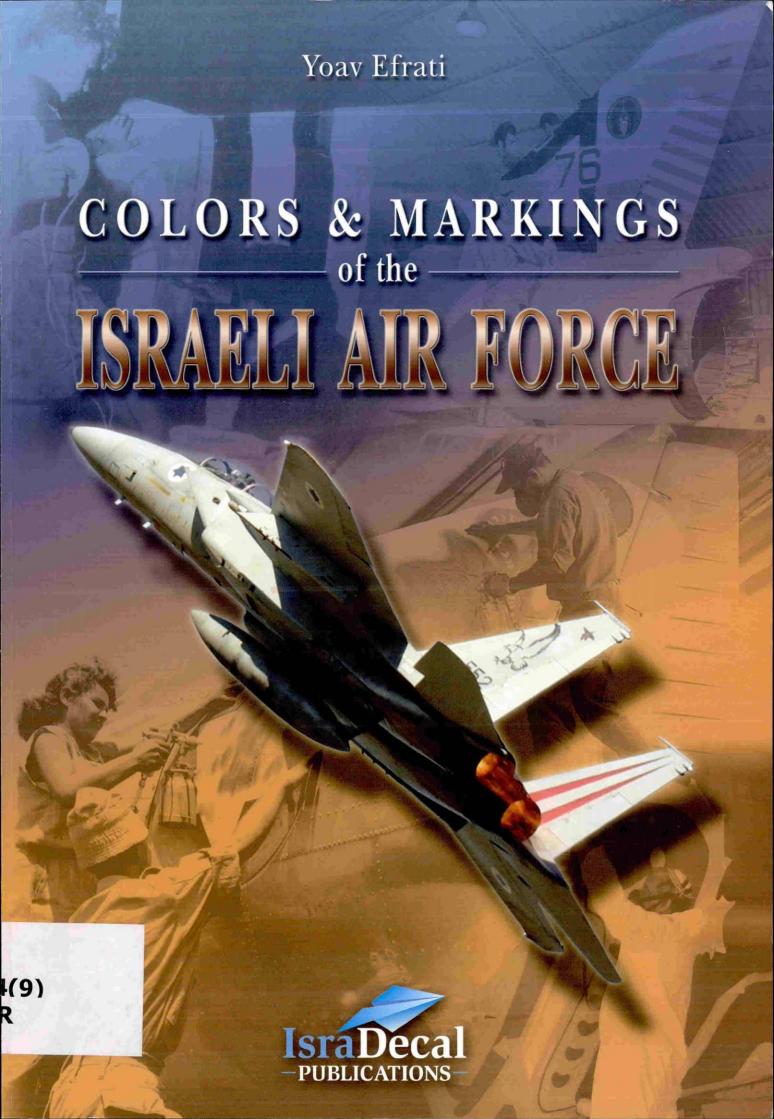


ספרייה דיגיטאלית להיסטוריה ומורשת חיל האויר

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COLORS & MARKINGS of the ISRAELI AIR FORCE

Written by: Yoav Efrati; yoave@elal.co.il Graphic Design: IsraDecal Studio To my family – Bruria, Leeor, Gilad and Lilach; to my friends and to future generations who share my love for the Israeli Air Force.

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Acknowledgments:

IAF Magazine
IsraDecal Publications - Ra'anan Weiss;
BIAF - Air & Space Magazine - Yehuda Borovic;
IAF Museum - Avi Moshe, Joseph Goldman;
Ran Yahalom, M.D.
Ofer Zidon
Ed Okun
Daniel Friedman
Alex Yofe



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Introduction

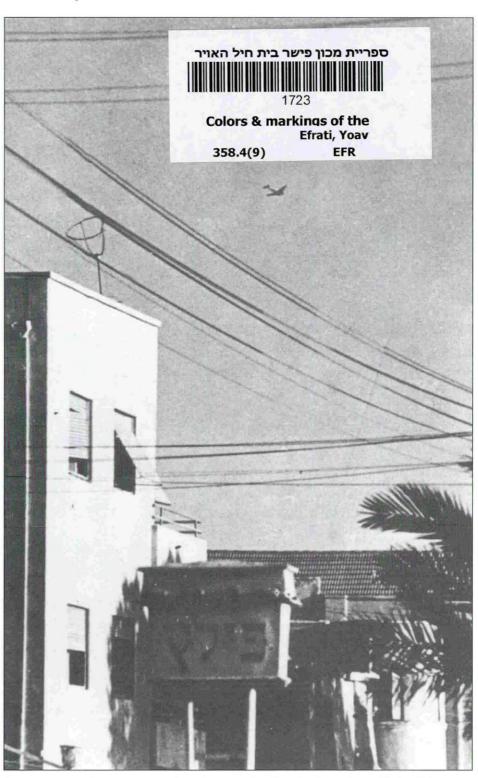
The air arm of Israel's Defense Force (T'zva Hagana Le Israel) has played a key roll in wining the wars waged against Israel by its Arab neighbors for past 57 years. Air dominance over the battlefield was learned by the founders of the Israeli Air Force prior to declaration of the state of Israel, in a war fought in the battlegrounds of Europe, Asia and the Middle East against the Axis powers of World War II. Through determination, skill and innovation the IAF has evolved from a 1948 fledging air force operating fabric covered light planes to today's most capable air force in the Middle East that provides Israel with peace through deterrence.

The Israeli Air Force has been a source of pride for the people of Israel since its humble beginning and as such its achievements have been well documented. As an avid enthusiast of the Israeli Air Force and model airplane builder for more than twenty years, I have researched the IAF in search of the airplanes which were made famous by their flyers and ground crews alike. To replicate these famous airplanes in both shape and color; I have made use of

hundreds of photographs, articles, official IAF written documentation, original IAF color chips personal interviews with pilots and ground crews, and in consultation with fellow model builders and IAF enthusiasts world wide, to obtained the correct colors and markings used on the IAF's most famous airplanes. Although the information presented to the reader in this book is comprehensive, it only serves as the basis from which to work from. For complete camouflage schemes, external changes and standard markings, the reader will have to obtain additional reference sources.

My efforts to replicate the colors and markings of famous airplanes used by the Israeli Air Force for hobby use did not end at the model builder's table. My research efforts to obtain authenticity with my plastic models were recognized by the Israeli Air Force Museum who granted me the honor of serving as their colors and markings consultant for airplane restoration between the

years 2000 and 2004. It is with pride and honor that I present before you a life time of research into my first love – the Colors and Markings of the Israeli Air Force from 1947-2005.



Above: Israel's first combat fighter plane was the Czechoslovakian built S-199 Avia. On June 3, 1948 native born Israeli and ex-RAF volunteer Spitfire pilot and First Fighter squadron pilot Modi Alon downed a pair of Egyptian Dakota planes that were on a bombing mission over Tel-Aviv.

1947-1955 & the War of Independence

n 1947 United Nations voted to partition the British mandated land of Palestine to a Jewish state and to an Arab state, to which the Arab members of the UN unanimously refused. On the eve of 14 May 1948 Israel declared its independence and the following morning Egyptian Spitfires bombed Dov-Hoz airport situated at the northern outskirts of Tel-Aviv destroying several of the light planes stationed there. Within hours all undamaged airplanes were dispersed throughout airstrips in the Negev (southern Israel) the Galilee (northern Israel) and to abandoned WWII RAF air bases in central Israel. On 31 May 1948, the IAF command ordered all available air assets to be camouflaged in brown and green top surface colors. For identification, a blue six pointed Shield of David on a white background circle was to be applied to the lower wings and the empenage, its application on top of the wings was not specified assumed in order to preserve the effectiveness of the upper surface camouflage. An additional white-blue-white recognition band was to be applied ahead of the vertical fin. An alphanumeric identification number code was introduced for application on the airplanes of the fledging Israeli air force. "Aleph" (A) was used for light transports, "Bet" (B) for medium transports, "Daled" (D) for fighter planes "Hai" (H) for multi engine dedicated bombers, i.e. B-17 and "Samech" (S) for multi engined transports. Airplane camouflage was inconsistent during the war of Independence, which lasted from May 1948 to January 1949. Airplanes delivered from abroad were rushed into service in their original colors. In November of 1948 the use of the somewhat confusing alphanumeric code was replaced with a four digit numeric with the first two digits standing for the aircraft type and the last two for the non-sequential airplane number.

The camouflage colors applied by war's end, after January 1949, was divided by the primary roll the airplanes were to be used for. Air to air combat airplanes such as the P-51D purchased from Sweden and Spitfire Mk.9e's purchased from Italy retained their original delivery finish of natural metal and silver, respectively. Ground support aircraft such as the Boeing Stearman, North American T-6 Texan and Piper Cubs were painted brown and green. To differentiate Czechoslovakian purchased grey and green camouflaged IAF Spitfires from their Egyptian counterparts, the Ocean Grey top

surface areas were over-painted Earth Brown. As more combat aircraft such as the P-51D, Mosquito and Meteors became available to Israel, the Stearman, Texan, Anson and Consul were assigned the dedicated mission of pilot training. The wooden De Havilland

Mosquito and fabric-covered airplanes were painted Doped Silver. Primarily aluminum fuselage airplanes such as the Texan painted in overall Trainer Yellow.



Above: The First of three IAF De Havilland DH-89 Dragon Rapid airplanes to be operated by the IAF during the 1948 war was Aviron Air Service airplane VQ-PAR. During the 1948, this airplane was fitted with external bomb racks and used to bomb the Jordanian capital of Amman and the Syrian capital of Damascus. On June 4, 1948 one of three operational Dragon Rapids in coordination with a Beechcraft Bonanza and Fairchild Argus were used to harass an Egyptian battle ship shelling Tel-Aviv and forced the ship to turn back to Egyptian waters.



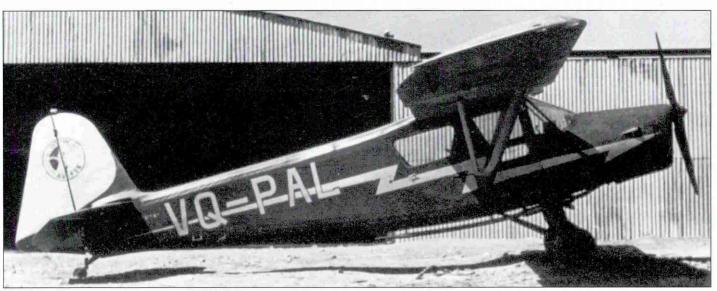
Above: Taylorcraft model BL VQ-PAJ - In December 1938 the Jewish underground organization of Etzel was formed with the aim of ousting the British out of Palestine. They formed a flying school which was headed by US Army Spanish civil war veteran Edwin Laibowitz who was joined by another American Jew, Haim Moshe Katz. To Edwin's own Taylorcraft model A, the Etzel purchased a pair of Taylorcraft model BL's. Taylorcraft call sign VQ-PAJ was painted red, while the other call sign VQ-PAH was painted yellow. On November 2, 1947 the Hagana formed the "Sherut Avir" flying service and operated these three Taylorcraft out of Lod airfield.



Above: De Havilland model 82 Tiger Moth – Three Tiger Moth aircraft saw service with the Jewish settlements in Palestine prior to the 1948 war, first of which was red and silver (colors not confirmed) airplane G-ACYN. This airplane was brought to Israel by American entrepreneur Haim Moshe Katz founded the Palestine Flying Service in 1937, with the aim of training Jews in the skill of flying. His efforts ended in 1938 after his single de Havilland crashed and rendered unairworthy.



Left: Two RWD-8 aircraft entered service with the Jewish owned Aviron air service in June 1937. The red and silver painted VQ-PAG along with VQ-PAK were used to train pilots of the Jewish militia called the Hagana (Defense in Hebrew) until September 1939 the outbreak of World War II when all air activity in Palestine was halted by the British authorities.

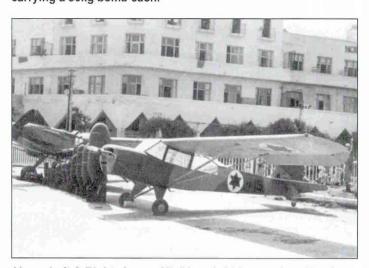


Right: Two RWD-13 aircraft were purchased in Poland in the mid 1930's for use by the Jewish owned air service named Aviron based in British Mandated Palestine. This aircraft, along with VQ-PAM were used for various light transport duties such as medical liaison with Jewish settlements in the Negev and the Upper Galilee. The first hostile action against Arab raiders conducted from the air occurred on 17 December 1947 using one of these airplanes which was originally sent to pick up two wounded Israelis in the Negev settlement of Halutza. After landing in Halutza the pilot Pinchas Ben Porat was informed that the two wounded persons he was to pick up had been transported by car to a hospital. The Jewish settlement of Nevatim reported to Halutza that they were under siege by the Arabs and that urgent armed support was in need. Ben Porat took on board his red and silver RWD-13 a passenger from Halutza, and managed to disperse the Arab raiders using repeated strafing runs from a hand held submachine gun and the tossing of hand grenades from the cabin door openings of the airplane.

Right: Taylorcraft model BL - December 13, 1947 Arab rioting in Lod forced the closure of the airfield located there and the three "Sherut Avir" aircraft were transferred to Sde-Dov on the northern outskirts of Tel-Aviv. Following the May 15, 1948 bombing of Sde-Dov by the Egyptian air force, all "Sherut Avir" airplanes were dispersed and camouflaged with top surface colors of brown and green with roundels applied only to the bottom of the wings and on the sides of the fuselage. One Taylorcraft went to the "Lavi" (Young Lion) group based in Yavniel in Northern Israel and the two others went to the Flying Camel group based in Nir Am in the Negev. With the delivery of Piper Cubs in November 1948, the Taylorcraft were phased out of service.



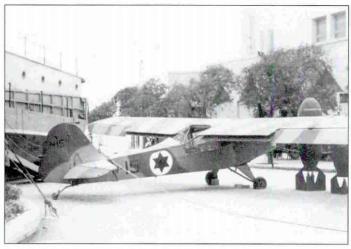
Above: A pair of Beechcraft Bonanza model 35 airplanes registered in South Africa as ZS-BWR and ZS-BWS reached Israel in May 1948 and were given IAF identification numbers B-41 and B-42. After the Egyptian Spitfire bombing of Sde-Dov on the morning of May 15, 1948 all the airplanes at the base were dispersed and over-painted in brown and green top surface colors available at hand. To aid airplane identification from the ground, ex-SAAF Spitfire pilot Boris Senior was tasked with evaluating the Star of David insignia on the Bonanza. Ground visibility of the open star was poor so he suggested that the Star of David be filled resulting in the IAF insignia as applied on IAF aircraft ever since. The Bonanza was fitted with a pair of underbelly racks capable of carrying a 50kg bomb each.







Above: On April 16, 1948 the IAF received its first Fairchild Argus model F-24R (UC-61K) after an Egyptian smuggler erroneously landed on an airstrip adjacent to an IDF southern base at T'zehelim. In the following months, three additional Argus airplanes were acquired from South Africa and the four were assigned IAF identification numbers B-30 through B-33. On June 4, 1948 Argus no. B-32 was shot down when pressing an attack against an Egyptian battle ship that was shelling Tel-Aviv.



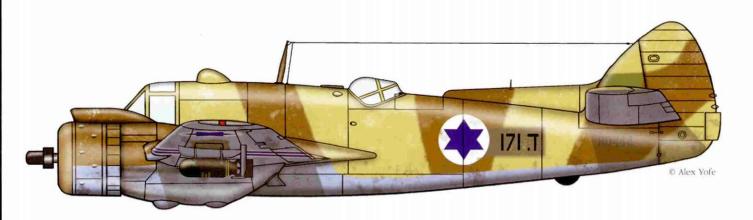
Above Left & Right: Auster Mk.IV no.A-15 is seen in a May 1949 arms display in Tel-Aviv. Twenty-one surplus Auster airframes were purchased from the RAF prior to their pull out from Palestine. With the exception of airframe numbers A-1,-7 and -13, Auster A-2 through A-20 were of this Mk.IV variant. RAF standard scheme for the Auster was a wrap around brown and green scheme. IAF refurbished Austers had a non-standard brown & green brushed on top surface scheme applied with a sky undersurface. Note the lack of overwing roundels which was standard for IAF airplanes between May 1948 and January 1949.



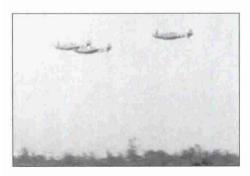


Above: Silver dope fabric covered De Havilland DH-89 Dragon Rapid currently on static display at the IAF museum at Hatzerim air base is painted to depict Aviron Air Service airplane VQ-PAR that was the first of three Dragon Rapids to be operated by the IAF during the 1948 war.

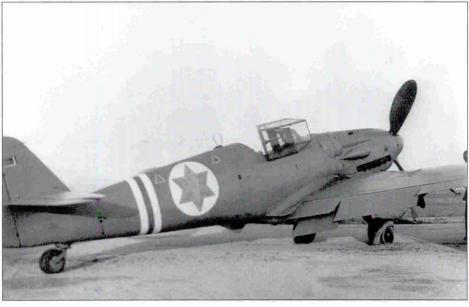
Left: Auster Mk.III no. A-13 is seen restored in the IAF museum. While the brown & green over sky colors are correct, the pattern is undocumented and spray gun application of the paint is not correct. Of the twenty one Austers purchased from the RAF prior to their pull out of Palestine in 1949, only airframe numbers A-1, A-7 and A-13 were of the Mk.III variant.



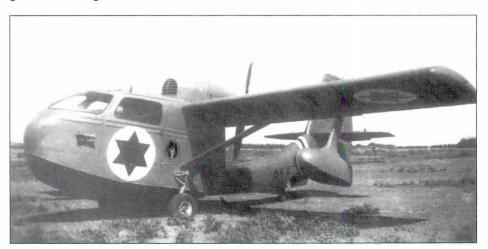
Above: On October 19,1948 D-171/RD488 flown by Canadian IAF volunteer Len Fitchett evaded Egyptian 2nd squadron flight leader Muhammad Abd-Al-Hamid-Abu-Zaid flying Hawker Sea Fury demonstrator G-AKRY that was chasing him. He used the Beaufighter's superior dive pulled out characteristics to force the pursuing Egyptian pilot into the waters of the Mediterranean. The following day on a mission over the Iraq Al-Sueidan fortress on the Ashkelon-Hebron road, Fitchett was hit by ground fire and had to ditch Beaufighter no. D-171 on the shore of Ashdod. He and his crew of three landed safely only to be murdered by the local Arabs. In the winter of 1995, the remains of Beaufighter D-171 washed ashore, revealing the desert camouflage of this Beaufighter TF.10 that may have been upgraded from Mk.VIc standards. The airplane was painted British Standard colors of Mid Stone BS362 (FS30266), Dark Earth BS450 (FS20095) with Light Mediterranean Blue (FS35177) under surface. The Beaufighter had roundels applied on the fuselage sides and below both wings with white-blue-white identification bands applied underneath both wings, outboard of the engine nacelles.



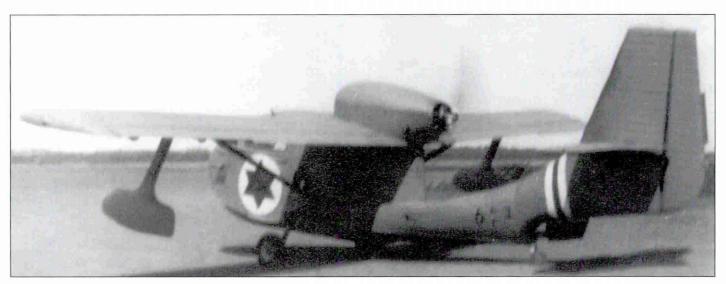


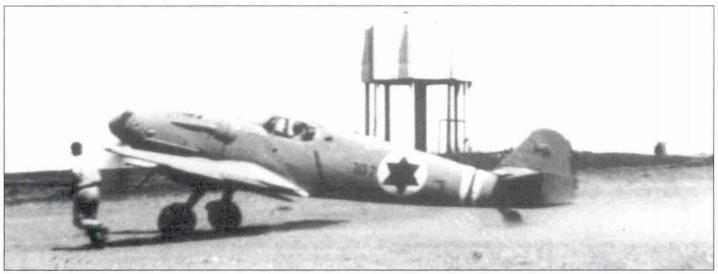


Top: The First Fighter squadron, also known as the 101 squadron began combat operations on 29 May, 1948 from the former Royal Air Force base of Ekron (currently know as Tel-Nof). The squadron's first mission was to stop the Egyptian army at Ashdod and prevent its advance north towards Tel-Aviv, 16 miles away. The mission was led by former United States Marine Corpus Corsair pilot, Major Lou Lenart of the famous VMF-214 Black Sheep squadron. Taking off at 19:45, equipped with bombs and 20mm guns under their wings, four Czechoslovakian built S-199 models of the Messerschmitt Bf-109G14 attacked the Egyptian armor column in several strafing passes. In the attack, former SAAF pilot Eddie Cohen was killed and former RAF pilot Mordechai Klibansky (renamed Modi Alon) "Messer" (Knife in Yiddish) was heavily damaged on landing. As a result of this attack, the Egyptian Army stopped its advance northward and instead entrenched itself along the Gaza – Hebron road, blocking off access to Jewish settlements in the Negev desert. In these photos we see the three Avias returning from this mission with Modi Alon's Avia being damaged on landing. Note the lack of identification number on Alon's Avia. Roundles were applied to the fuselage sides and lower wing surfaces with white-blue-white identification band applied to the aft fuselage. The Avia's were painted in Czechoslovakia in an overall RAL6013 Khaki "Uniform" green camouflage.



Left & Below: Prior to the May 1948 war, the Republic Aviation Sea Bee was owned by Aviron airline and was painted silver with red trim and had the civil registration number VQ-PAV applied to its wings. After the May 15, 1948 bombing of Sde-Dov airport, the Sea Bee was dispersed to Hertzelia field to serve with the First Fighter squadron where it was given an overall green finish (as applied to Spitfire D-130) and identification number B-61. In November 1948 the airplane was renumbered 0901 and was seen with its wingtip floats removed and a brown disruptive pattern applied to the upper surface.





Above: After the IAF raid on the Egyptian troops at Ashdod, Egyptian Spitfires conducted search and destroy missions in search of IAF fighters. Some of these raids were on the former RAF base of Ekron where the Avias were assembled and based. By June, the First Fighter squadron moved its operations to a dirt field on the outskirts of Hertzelia, where the adjacent orange grove proved excellent camouflage and the town's water tower could be used as a control tower. It is believed that Avia no. D-107 may have been the aircraft that Modi Alon used to down the two Egyptian Dakota bombers on June 3, 1948 (shown on page 3).

Right: Crates containing two P-51D Mustangs arrived from the United States in September of 1948. The first airframe was made airworthy at the beginning of November, and the second in the second half of December. In this photo we see one of the two Mustangs being run up after assembly. Note the application of roundels underneath both wings and on the fuselage; no roundels were specified for application on the upper fuselage at the time this airplane was assembled.





Left: Spitfire Mk.9 no.D.130 with C-type wing was the IAF's first Spitfire. Its basic airframe was that of an Egyptian Spitfire ditched by its pilot at Hertzelia beach to which parts were salvaged from junk left over by the British prior to their pullout of Palestine. Although this airplane suffered a temporary set back, it was returned to service. Spitfire D-130 was painted overall green, similar to that used on the Avia at the time. National insignia was applied only to the fuselage and lower wing surfaces. Note the white-blue-white identification band applied to the aft fuselage as well as the blue numerals D.130.

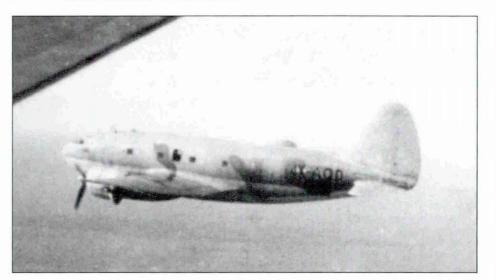




Top Left: South African registry ZS-AVK was the first DC-3 Dakota to enter IAF service. Between May 1948 and Jan 1949 the fledging IAF operated six Dakota transports which were used both as a transports and make shift bombers. On the night of 10-11 June 1948, this aircraft was used to conduct reprisal bombing over the Syrian capital of Damascus, dropping 2,000 lbs. of bombs over the city and putting an end to Syrian air superiority over the Upper Galilee for the duration of the war.

Left: Fifteen UC-45 Nord Norseman transports were purchased as USAAF surplus in West Germany, with the first two reaching Israel in May 1948. Prior to the October 1948 "Yoav" offensive aimed at routing out the Egyptian army from the Negev, six Norseman numbered B-51 through B-56 were employed both as transports and bombers. They were camouflaged brown and green over sky blue with roundels applied to the bottom of the wings and fuselage sides.

Right: The C-46 Curtis Commando was the first heavy transport plane to serve with the IAF. Ten Commandos were purchased in the US under Panamanian registry. During the initial stages of the War of Independence these aircraft were not camouflaged and had Panamanian Flag and Panamanian registration number applied for identification. The first C-46 landed in Israel on March 6, 1948, eventually all ten aircraft were used to air lift war supplies from Czechoslovakia to Israel including Israel's first fighter plane, the Avia model S-199 version of the Messershmitt Bf-109G. Soon after the war, these aircraft were sold to Arkia Air Lines and abroad with the IAF opting for the C-47 Dakota for the transport roll.





Above: Two Douglas C-54/DC-4 Strikemaster transports served with the IAF during the 1948 war alongside the C-46 Curtis Commando. The Strike Masters participated in the airlift of Spitfires from Czechoslovakia to Israel during the Sept.24, 1948 Velveta I and Dec.18, 1948 Velveta II operations. During their wartime service with the IAF, the Strike Masters retained their original aluminum finish with red trim. One of these airplanes, 4X-ACA had the distinction of airlifting the first president of Israel, doctor Haim Weizman to Israel on September 29, 1948. Only one Strike Master remained in IAF service by the end of the war. It was transferred to EI Al airlines to become the nucleus of Israel's national air carrier.



Above: S-199 Avia no. D-120 is seen with uncommon over-wing Stars of David applied, most likely adopted by the squadron only after the Velveta I Spitfires arrived with their over-wing roundels applied. Apparently due to either lack of time or lack of paint, the fuselage identification white-blue-white blue center stripe and the left fuselage identification roundel lack the blue Star of David. Note the First Fighter squadron insignia applied only to the left side of the engine cowling, the red spinner and the red-white-red rudder stripes.



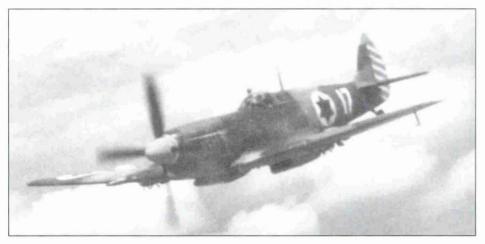
Above: Avia no.D-123 is seen photographed in the Jan-Feb winter months of 1949, marked with an early identification number in large type as applied to P-51D Mustangs D-190 and D-191 at the time. D-123 was later given the four digit identification number 1905. This airplane was documented to taken part in combat operations during the "Yoav" offensive of 22-25 October 1948. During this effort the IDF dislodged the Egyptian army from the Gaza-Hebron road whose headquarters was based at the Iraq El-Suedan police station fortification. The rudder, not visible in this photo, was most likely painted in the 101 squadron colors of red and white.



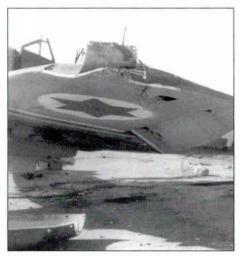
Above: After each day's combat operations, 101 squadron pilots made their way to the "Atom Bar" on the coast of Tel-Aviv for a drink. During one such evening, the pilots decided that their fledging squadron needs a squadron insignia. Former US Navy pilot from California, Stan Andrews drew-up a winged skull wearing a flying cap while Modi Alon drew up a Scorpion. A vote was taken and Stanley Andrews insignia won. Soon after, silk screen stickers of the red, white and black "angel of death" insignia were printed up and applied to the left nose section of the airworthy fighters. In this photo we see "the father of the IAF" Ezer Weizman posing next to the nose section of the Avia



Above: S-199 Avia no.120 - During a 1992 visit to the IAF museum, ex-Messer pilot and IAF commander Ezer Weizman commented that the RLM02 grey painted Avia in the museum was the wrong color. I took this opportunity to send Israel's president at the time, a letter with samples of possible Avia colors. In reply I was invited to meet with the President and he revealed the color to be "Khaki Green, similar to that seen on army uniforms". Following this meeting with Weizman, the IAF museum staff found an Avia fuel cap, which confirmed the actual color to be RAL6013 (~34257).



Left: Spitfire Mk.IXe no.17 (s/n 2018) was ferry flown to Israel during the 18-26 December 1948 Velveta II operation. This photo is taken from the window of Mickey Mouse B-17 no.1602 while on route to bomb Egyptian Army forces entrenched in the Faluga pocket overseeing the coastal route to the Negev. Operation code named Chorev conducted between December 22, 1948 and January 7, 1949 pushed the Egyptian Army out of the Negev and into the Sinai desert. In this photo the Spitfire is painted in RAF standard camouflage colors with red spinners and red and white rudders but no First Fighter squadron insignia applied to the engine cowling.





Above Left & Right: Spitfire MK.9e no.14 - At the end of September 1948, three (clipped wing) Spitfire Mk.9e's were ferry flown from Czechoslovakia to Israel by members of the First Fighter squadron in an operation code named after a hand cream called "Velveta". These Spitfires were numbered D-132 through D-134 and served alongside Avia's D-108/113/114/117/118/120/121/123 and Mustangs D-191 and D-191. An early October cease-fire enable the First Fighter squadron to add their famous flying "angel of death" insignia to the left side of their airplanes in addition to painting their spinners red and rudders with diagonal red and white stripes. By The 30th of December 1948, large, two digit white identification numbers replaced the alpha numeric fuselage number applied to the Spitfires and Mustangs. On December 30, 1948 Canadian Spitfire ace Jack Doyle piloting Spitfire no.14 downed an Egyptian Macci 205 while on patrol over Abu Aweigila and El Hamma.



Above: AT-6 Texan no.1107 - The natural metal Texans obtained from the US in November 1948 were painted locally in unspecified brown and green upper surface colors with no specific color designated for the lower surfaces. Since these Texans operated out of Eqron alongside 35th wing Nord Norseman, there's reason to believe that they were painted in the same colors as the fabric covered Norseman. The colors are believed to have been in BS381c/450 (FS20095) Dark Brown, BS381c/641 (FS34086) Dark Green over BS381c/637 (36270) Medium Sea Grey undersurface. The first six Texans were fitted with bomb racks underneath the wings to enable carriage of eight-50 lbs. bombs and a pair of 7.62mm machine guns.



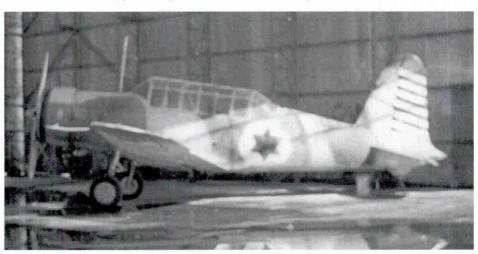
Above: AT-6 Texan no.1103 - In November 1948 the IAF introduced four digit identification numbers to its airplanes with the Texan & Harvard receiving 1100 series numbers. Since no roundels were specified for the upper wing surfaces, Texans converted divebombers had the last digit of their identification number applied atop of the wings and both sides of the rudder.





Above Left & Right: Piper Cub model PA-11-90 no.409 and no.0420 - Twenty aircraft of this Piper model entered service with the IAF beginning in September 1948. Between October 15 and December 26 of 1948, these airplanes conducted in nightly harassment missions against Egyptian troops in the Negev. These airplanes were fitted with external pylons, enabling them to carry up to a 60kg bomb load. They were painted brown and green over light blue with roundels applied only to the bottom of the wings and fuselage sides.

Right: Of two BT-13's purchased in the US, only one arrived in Israel in May of 1948. This aircraft was made airworthy two months later and served with the First Fighter squadron until January 1949, after which it was removed from service due to lack of spare parts. The BT-13 was given a brown and green upper surface camouflage with roundles applied to the aft fuselage and the lower surface of the wings. Prior to November of 1948, the BT-13 was given the Hebrew identification code "Bet"-62 (B-62), and after the introduction of the new numbering system in November of that year, it was given the identification number 1001.





Left: Four TF.10 models of the Beaufighter purchased in England reached Israel in August 1948. They were numbered D-170 through D-173. D-173 crashed soon after its arrival and did not see combat. D-171 was downed by ground fire in October 1948 and its remains were found during a 1995 winter rain storm. In this photo we see the remains of D-170 that crash landed on November 20, 1948. The photo clearly shows the high contrast desert colors applied to the airplane as well as the Mk.VI c / TF.10 clear canopy that covers the ADF directional loop.

Right: This photo shows the last airworthy Beaufighter, numbered 2202 (marked as D-172 prior to November of that year). Of note is the vertical fin leading edge extension and propeller spinner common to the TF.10 version of the Beaufighter. The camouflage pattern of the Beaufighter in this photo coincides with the application of the Dark Earth (FS20095), Mid-Stone (FS30266) over Light Mediterranean Blue (FS35177) desert scheme applied to Mk.VIc Beaufighters by RAF operating from Malta during WWII.





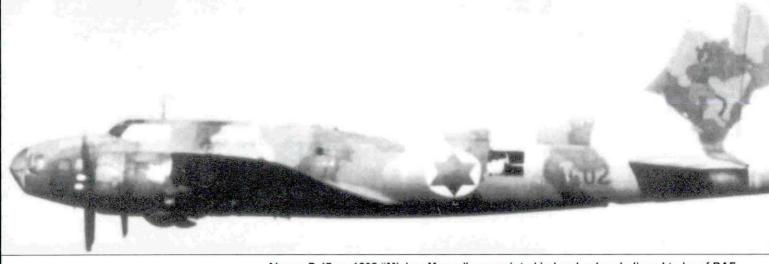
Above: P-51D Mustang no. 2302/D-191/41 was the second Mustang to enter IAF service during the 1948 war. By January 1948 it wore the fuselage number 41 and had two kills applied. On November 11, 1948 Boris Senior downed an Egyptian Dakota over the Egyptian air Base of El Arish (a/c identified as D-191 at the time). On January 5, 1949 Seymour Feldman downed and Egyptian Macci 205 (a/c identified as no.41 at the time of the second kill). Note the two kill silhouettes applied just below the left side of the canopy to each side of the name "Gedy".



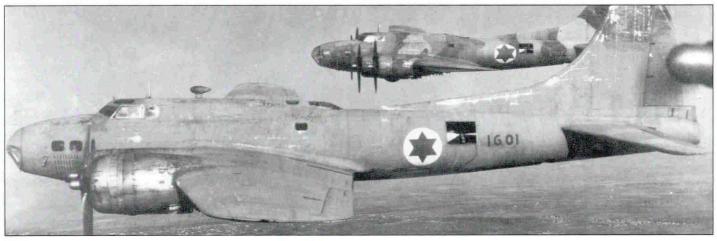
Left: In this winter 1948 photo, former SAAF pilot Boris Senior is seen standing next to P-51D no.D-190 (s/n2301) nicknamed "Tink", short for Tinkerbell of Peter Pan fame. "Tink" was painted with large black identification number D-190 on both sides of the fuselage, a red spinner, red and white rudder stripes and Star of David national Insignia applied to the fuselage sides, bottom of wings as well as to the top of the wings. The Star of David roundels were applied to the top of both wings of Avia and Mustangs in October 1948, after the arrival of the Velveta I Spitfires. Mustang no. D-190 has two kills to its credit, an RAF 13th squadron Mosquito PR.34 downed by USAAF veteran Wayne Peake on Nov. 20 1948, an Egyptian Macci 205V downed by Boris Senior on Jan. 5, 1949.



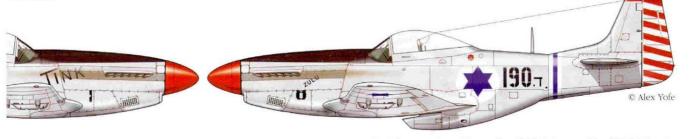
Above: The clipped wing Spitfire Mk.IXe in this photo was restored by the IAF Museum to represent Velveta II Spitfire serial no.2011, fuselage number 26, that was ferry flown to Israel from Czechoslovakia by one of the first four IAF flight school graduates, Danny Shapira. Spitfire no.26 is unique in having nose art applied, showing an Eagle clutching a Spitfire. All Spitfires ferry flown to Israel during the 1948 war were clipped wing Mk.IXe versions wearing RAF standard colors of Ocean Grey (FS16187) and Dark Green BS381c/641 (FS14086) on top and Medium Sea Grey BS381c/637 (FS36270) underneath. The need to cover the original Czechoslovakian over-wing roundels while on route to the provisional air base of "Etzion" in Yugoslavia, use was made of readily available white and blue paint to paint Star of David roundels over the wings for the first time. After their Spitfire's arrival in Israel, over wing roundels were also adopted for use on the squadron's Avias and Mustangs.



Above: B-17 no.1602 "Mickey Mouse" was painted in local colors believed to be of RAF origin consisting of BS381c/450 (FS20095) Dark Brown, RAL6013 (~FS34258) Avia Green, and BS381c/361 (FS30475) Light Stone over (~35177) Light Mediterranean blue. B-17 no. 1601 is believed to have retained its original faded FS34088 Olive Drab over FS36270 Neutral Grey colors. B-17 no.1602 carried the Mickey Mouse motif during the November 11, 1948 – December 23, 1948 offensive to push the Egyptian army out of the Negev. To ward off Egyptian Macci 205 and Spitfire Mk.9's the B-17's were escorted by First Fighter squadron Spitfires and Mustangs.



Above: B-17 no. 1601 & 1602 - On the night of June 12, 1948 ex-USAAF B-17 navigator and 11 other former B-17 crew members and mechanics took off in three B-17's for the IAF staging base of Etzion in Czechoslovakia. While there, the airplanes were fitted with external bomb racks and Czechoslovakian made machine guns for their ferry flight to Israel. Each of the three bombers was to bomb a different target prior to their arrival in Israel. The sole B-17 with a high altitude oxygen system was to bomb the Egyptian King Farouk's palace in Cairo. The other two were to bomb the Egyptian forward air base of El Aharish and the Egyptian army headquarters in Gaza, due to the lack of the famous "Nordan" bomb sight the results did not live up to the optimistic expectations set forth by the IAF command.



Above: P-51D Mustang no. D-190/2301/40 has two kills to its credit: an RAF 13th squadron Mosquito PR.34 downed by USAAF veteran Wayne Peake on Nov. 20 1948 and an Egyptian Macci 205V downed by Boris Senior on Jan. 5, 1949. D-190 was given the nickname "Tink" (see photo on page 12).

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1955-1957 & the Suez War

■ he rising of Egyptian leader Camel Abdel-Nasser to power in 1955 brought Arab nationalism in direct conflict with British and France global interests. The new Egyptian leader expelled British forces that were in control of the Suez Canal. In September 1955 Nasser declared his alliance with the Soviet Union who promised him civilian aid such as the building of the Aswan Dam and the supply of military equipment including 150 MiG-15's, 50 IL-28 twin engine bombers and 70 IL-14 twin engine transports. To counter the new Egyptian threat Israel sought jet fighters in Europe and in the US. The Truman administration refused to lift the embargo placed on the sale of weapons to Israel, but did not veto such sale by other western nations. Canadian built F-86 Sabers did not reach Israel due to the rapid transfer of a dozen Mystére IVs from France to the IAF on April 11, 1956. That summer the IAF began planning the destruction of the Egyptian air force on the ground in a pre-emptive strike. To reach the Egyptian airbases, over water routes and way points were chosen. To make the attacking airplanes less conspicuous from above, new camouflage colors were devised consisting of Earth Brown and Dark Sea Blue on top and light grey on the bottom. The colors are approximate match to German RAL standard of RAL5008 Graublau, RAL8008 Olivbraun and RAL7044 Seidengrau undersurface. With Israel's plans coinciding with Anglo-French interest in retaking control of the strategic Suez Canal passageway from Egypt, the three countries devised operation Musketeer to remove the Egyptian army from the Sinai and retake the Suez Canal. To legitimize Anglo-French occupation of the Suez Canal the plan required for Israel to invade the Sinai desert all the way to the Suez Canal. After Israel forces were to reach the Canal, British and French forces were to "intervene" in the fighting and occupy the Suez Canal in order to prevent Israeli forces from controling it. The Suez campaign was

divided into two phases. In the first phase, Israel's entry into the Sinai, IAF airplanes were painted with identification bands on the empenage and wing surfaces consisting of two widely separated black stripes superimposed on a yellow band. During the second phase of the campaign, where British and French airplanes were to take part; a wide yellow band was to feature two black bands at its center. The four digit individual aircraft number was replaced by a two digit identification number. The task of attacking the Egyptian Air Force on the ground was assigned to French and British air force and navy with the IAF assigned only close air support for IDF troops in the Sinai. Natural metal Ouragan and Mystére IV's were relegated combat air patrol missions with Mystére IV's of the First Fighter squadron downing seven Egyptian Jets. The plan for the destruction of the Egyptian air force on the ground, operation "Moked" (Focus) was shelved for the next round.





Upper Left: The IAF's first PR.16 Mosquito entered service with the IAF on July 5, 1948. Four additional PR.16's were purchased from France in 1951 and a further batch of three were purchased in England prior to the October 1956 Suez War. The pilots of this squadron surprised Israel's first Prime Minister that also held the post of Minister of Defense by providing him unauthorized mission photographs taken of Egyptian air bases and military installations. Many of these same photographs taken in the mid-1950's were used to plan operation "Moked" which enabled to destroy the Egyptian Air Force on the ground during the Six-Day War.

Lower Left: The most well know nose art to be applied to the Mosquito was this "Flying Bat" nose art applied to the door of Knights of the North squadron Mosquito FB Mk VI no.K-2127, which also had black spinners and rudder. As the number of Mosquitoes in service increased, the Knights of the North squadron developed into its own and the night fighter element was moved to another air base. The Night Fighter Mosquito unit became the Bat squadron with the arrival of the Meteor NF.13 just prior to the Suez War.



Above Left: Boeing PT-17 Stearman no.2701 is seen in 1949-1950 brown and green over Light Mediterranean Blue scheme, with RAL1032 (FS33637) Trainer Yellow identification stripes applied to the fuselage and wings. The Stearman served as the IAF's primary trainer for 15 years until its replacement by the Piper model PA-11-95 in 1960. The Stearman had a four-digit number applied starting with the number 27. The last two digits of the number were applied to the top of the right wing, bottom of left wing, and to both sides of the rudder, with the full four-digit number applied to the sides of the fuselage.



Above Left: Immediately after the War of Independence, eighteen Piper Cubs were purchased to replace those aircraft lost during the war. The airplanes delivered during 1950 and were given ID numbers 0421 through 0436 and were painted in an overall yellow finish with a blue cheat line. In 1955 a further batch of this model entered service and were given ID numbers 0438 through 0467 and during the 1956 war were seen in an overall FS34087 olive drab finish.



Above Left: Fokker S-11 Instructor no. 3105 - Forty S-11 Instructors were purchased by the IAF in 1951 to replace the Boeing Stearman. Seven successive landing gear accidents within a year lead to its removal from the flight training role in 1953. The remaining aircraft were transferred to the Flying Camel squadron to serve as light transports until they were prematurely retired from service in 1956. The S-11 were assigned identification numbers 3102 through 3141 and painted overall RAL1032 (FS33637) Trainer Yellow. The four digit identification number was applied inboard of the national insignia to top right and bottom left wings as well as to both sides of the fuselage with the number applied aft of the roundel.



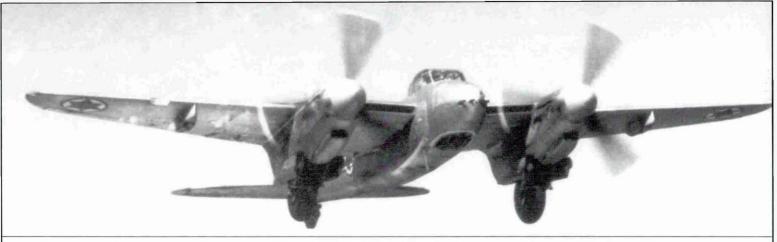
Above Right: AT-6 Texans reverted to their original trainer roll in February 1950, with the opening of the IAF flight school in Sde Sirkin (today's Ts'rifin). Fledging pilots acquired 60 hours of initial flight training on the Stearman, followed by 80 hours on the Texan. Texan no.1113 shows extensive paint chipping due to the application of the brown and green paint directly on to the Aluminum fuselage. Four digit identification numbers were applied to the top right wing, bottom left wing and both sides of the fuselage. RAL1032 (FS33637) Trainer Yellow stripes were applied to the fuselage (just aft the wings) and on both wing surfaces (just outboard of the aileron inboard hinge).



Above Right: Hiller Model 360, US Army designation UH-12, no.3301 - was the first helicopter type to enter service with the IAF. Two entered service with the IAF in May 1951 and were given tail numbers 3301 and 3302. The UH-12 seen in this photo is painted silver and has a white and blue Star of David applied below the cockpit cabin. With the introduction of the Sikorsky S-55 into IAF service in 1956, the HU-12 was relegated to the pilot training roll and was painted overall RAL1032 (FS33637) trainer yellow.



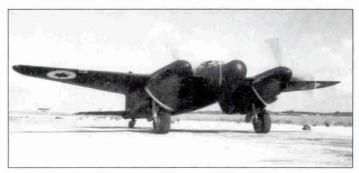
Above Right: Between March 1949 and April 1956 the IAF flight school operated nine Avro Ansons, and a combination of fifteen Consols & Oxfords. These twin engine aircraft were used as navigational trainers and as lead in trainers for the Mosquito fighter-bombers prevalent at the time. In the beginning of the 1950's these twin engine trainers were painted in an overall silver dope finish. To differentiate Israeli trainers from similarly painted airplanes used by Egypt, red-orange (maybe FS12197) identification band was applied just ahead of the vertical fin and two bands separated by a wide gap were applied on top and bottom of both wings.



Above: The IAF operated 56 Mosquitoes Mk.VI in two squadrons, the Valley squadron and the Knights of the North squadron. The silver dope painted Mosquitoes of the Valley squadron were identified by their red spinners and rudder, while those of the Knights of the North were identified by their black spinners and rudder. The Mosquitoes were assigned an alpha numeric code number starting with the Hebrew letter equivalent of K with the first two digits 21XX signifying the Mosquito's type number.



Above: The February 17, 1951 Mosquito purchase in France also included three TR Mk.33 conversion trainers. These aircraft were assigned to the Valley squadron and had an overall FS33637 Trainer Yellow finish with red spinners and rudder. In 1953 these TR Mk.33 trainers were transferred to the night fighter tactics evaluation unit and had their spinners and rudder painted black.



Above: Amongst the first batch of Mosquitoes purchased in France were approximately 20 Merlin engine NF.30 overall flat black night fighters. These airplanes were purchased without radar, so a 6.5-kilometer American APS-4 radar was fitted to these aircraft locally. In 1953, Mosquito pilot Hugo Marom was placed in command of a test and evaluation unit that was to develop night fighter tactics for the IAF, this unit evolved to become the Bat squadron.



Above: Stearman model PT-17 no.31 (full number 2731) is seen painted in a 1950-1956 silver dope finish. This airplane is flown routinely by IAF museum founder Ya'akov Terner during the holidays, when many Israeli citizens come to visit the museum which is situated at the outskirts of Beer-Sheva.



Above: Sikorski S-55, US Army designation UH-19A, entered service with the IAF on November 10th 1956, four days after the cease-fire that ended the Suez War. Until their removal from service in 1963, the two IAF S-55 helicopters numbered 02 and 03, were painted blue, light tan and grey undersurface. The grey was also applied to the bottom of the fuselage and the lower surface of the main rotor blades. Note that the Star of David roundel was also applied to the engine cowling located on the nose of the aircraft. Current IAF museum S-55 restoration has a UH-19B dropped tail boom that was not used when the S-55 were in operational service.



Above: Spitfire 9e no. 48 - With the 1953 arrival of P-51D/K Mustangs from Sweden, the First Fighter squadron turned over their Spitfire Mk.9e's to the new Scorpion squadron. The Scorpions adopted a yellow spinner and yellow and black rudder for identification. Between October 1954 and May 1955, thirty Spitfires were transferred to Burma and by mid 1956 all remaining Spitfires were removed from service.

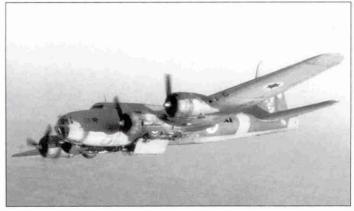


Above: The IAF operates a single T-6G Texan purchased in England in 1978. Along with the silver doped Stearman, the IAF museum's founder Ya'akov Terner uses the Texan for aerobatic displays. The airplane is painted overall FS33538 Insignia Yellow (as opposed to RAL1032/FS33637 used on 1950's vintage Texans). A three digit 001 is applied atop the left and bottom right wings and both sides of the fuselage. In preparation of the 1956 Suez War, the overall Trainer yellow scheme was replaced by a brown and blue over grey scheme.

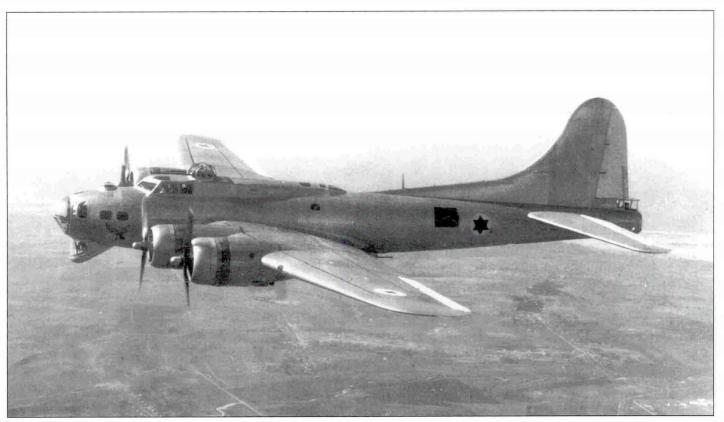
Right: On June 17, 1953 the first pair of Meteor T.7 trainers reached Israel. In the acceptance ceremony attended by the first Prime Minister & Minister of Defense David Ben-Gurion, he stated that the noise made by these new jet planes sounded like gale winds and storms. The First Jet squadron soon applied his words on the first two Meteors with Meteor no.13 given the name "Sufa" (Storm) and no.14 the name "Gale" (Sa'ar). In this IAF museum restoration Meteor T.7 no.15 is seen painted in original delivery painted High Speed Silver finish with the name "Ra'am" (Thunder) applied below its windshield.





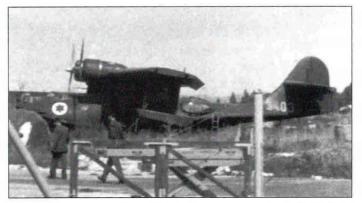


Above Left & Right: B-17G no.1602 seen in post 1948 war colors. The top surface shows no roundels, indicating that these colors were applied prior to the 1956 war. It is possible that this scheme is a trial application of brown & blue over grey that was evaluated prior to the 1956 Suez War. The deep contrast between the colors, and the fact that the Catalina was used by the Hammer squadron at the time, hint at the use of FS15042 Dark Sea Blue, BS381c/361 (FS30475) Light Stone over BS381c/637 (FS36270) Medium Sea Grey.



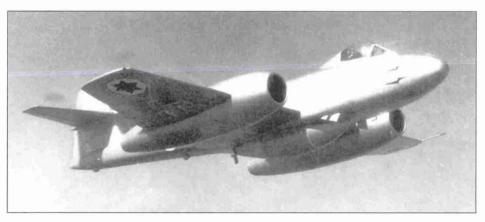
Above: A top view photo of B-17G no.1602 in a post-1956 war natural metal finish. Note the application of roundels on the top of both wings and the radar fitted at the chin turret location. To the left side of the nose, a black eagle was painted same as used by the Valley (Mosquito) squadron and copied from a logo applied to bottles of "Bira Nesher" beer.





Above Left & Right: Between 1951 and 1956, three PBY-5A models of the Catalina served alongside the Hammer squadron's three B-17 bombers. The Catalina served in their original US Navy FS15042 Gloss Dark Sea Blue color and had four digit identification numbers 3401, 3402 and 3403 assigned. Roundels were applied on both sides of the nose, atop the right wing and to the bottom of the left wing. The four-digit ID number was applied to the vertical fin root and inboard of the wing ID roundels.

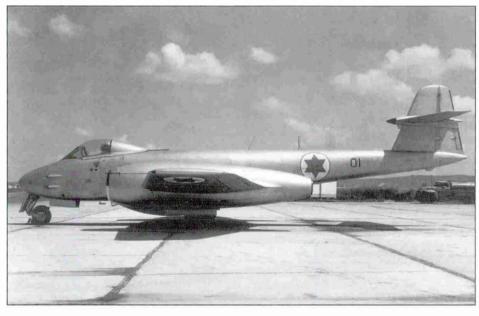
Right: Soon after acceptance of a total of six two-seat T.7 trainers, eleven wide intake Meteors F.8 arrived in Israel. These Meteors were given consecutive identification numbers 01 through 11. For better contrast between the aircraft's High Speed Silver paint finish and the white background circle of the Star of David roundel, a thin blue border was applied at its circumference.





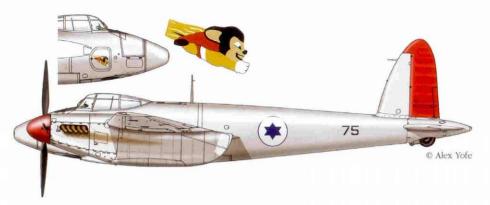
Left: Black Spitfire no.57 - The Spitfire was removed from IAF service in April 1956. One aircraft, number 57, was adopted by the former commander of the northern air base of Ramat-David, Ezer Weizman. "Ezer's Black Spit" was initially painted matt black with red intakes, red and black rudder, red fuselage lightning bolt, and red spinner. Star of David roundels were applied atop the left wing and on the bottom of the right wing. A First Fighter squadron insignia was applied just forward of the cockpit entry door and a Ramat-David air base insignia was applied to the right side of the vertical fin.

Right: To differentiate from similar High Speed Silver painted Egyptian Meteors, the intake lips and nose tip were divided into four segments alternating in a clockwise direction black-white-black-white, with the vertical fin forward bulb tip also painted black. The F.8's hooded canopies were replaced with non hooded versions when the Meteor FP.9's began arriving in the latter half of 1955.



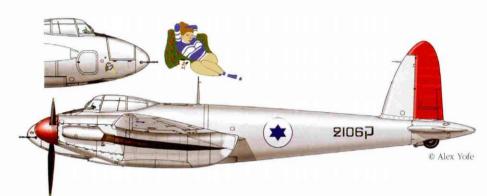


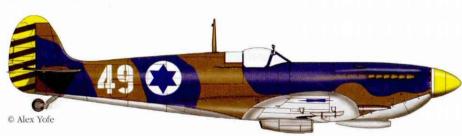
Left: The first French made Nord Noratlas model N2501-IS landed in Tel-Nof air base on November 1, 1955. Two additional Noratlas aircraft arrived in January 1956 to serve alongside C-47 Dakotas of the Elephant squadron. Just prior to the Suez War, they were painted in a brown and blue over grey scheme and took part in the airdrop of IDF paratroopers and equipment in the strategic Mitle Pass in the Sinai. After he war, three more aircraft N2501-IS models were purchased from France and sixteen model N2501-D from West Germany. The Noratlas served with the IAF for 23 years, until it was replaced by C-130 Hercules transports after the 1973 Yom-Kippur War.



Left: Mosquito no.75 was one of fourteen de-navalized Mosquito TR.33's purchased directly in England in 1954. It belonged to the Valley squadron and had the same red spinner and rudder markings as K-2106, but with an abbreviated call number. At the forward cockpit entry door, on the right side of the nose, a Mighty Mouse nose art motif was applied. As will all silver painted Mosquitoes, national insignia was applied on the aft fuselage and on the top and bottom of both wings.

Right: Mosquito K-2106 of the Valley squadron was the "sweet heart" of the squadron, having a girl painted ahead of the cockpit entry door on the right side of the nose. As told me by a mechanic of the squadron, the girl was painted on the right side of the nose because the right engine always overheated. The girl artwork on the nose of Mosquito Mk.VI no.K-2106 made cover girl of the June-July summer 1955 issue of Israel Air Force magazine. The aircraft was painted overall silver with red spinners and rudder. Black paint "spikes" were painted aft the exhaust stacks to prevent the exhaust from staining the silver engine nacelles with roundels applied at six positions.

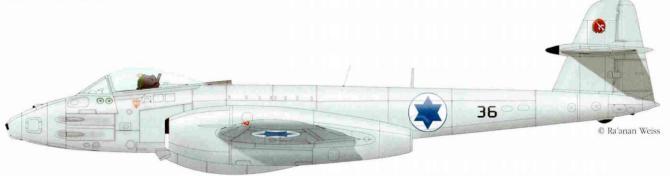




Left: With the delivery of P-51D Mustangs purchased from Sweden in 1953, the First Fighter squadron turned over their Spitfires to a new formed Scorpion squadron. The new squadron operated the Spitfire in the advanced training roll until they were removed from service in early 1956 (prior to the October 28, 1956 Suez Campaign). In the first half of 1956, the IAF initiated the application of a new brown and blue over grey scheme on its ground attack aircraft, including Scorpion squadron Spitfires.

Right: T-6 Texan no.18 is painted in IAF flight school late 50's - 1961 color scheme of RAL5008 blue, RAL8008 brown and RAL 7044 undersurface grey with RAL1032 (FS33637) Trainer Yellow trim applied to the engine cowling, empennage, wing tips and wheel hub covers. With the introduction of the Fouga-Magister jet trainer to the IAF in 1961, the IAF sold their Harvards to the civil aviation market.





Above: Nine FR.9 photo-recon versions of the Meteor entered service with the First Jet squadron and there were assigned fuselage numbers 31 through 39. On September 1, 1955 a pair of Meteors were scrambled to intercept four Egyptian Vampires operating deep within Israel territory. Formation leader Captain Aharon Yoeli, piloting FR.9 no.36 spotted the Vampires and downed two of them, while all the while his wingman Captain Yoash Tzidon covered his flank. These two kills were the first jet fighter kills attained by the IAF.



Above: Three Meteor NF.13 night fighters arrived in Israel between September and October 1956, just prior to the Suez War. A further three night fighters arrived in March 1958. The night fighter meteors replace the Mosquito NF.30 operated by the Bat squadron who was assigned the development of night fighter tactics during the early 1950's. These aircraft entered service in British standard colors similar to the German RAL standard paints used at the time by the IAF. The camouflage pattern applied was the same used on RAF Meteors Royal Sea Blue BS381c/106 (FS25044) replacing the green and Dark Earth BS381c/450 (FS20095) replacing the grey and Extra Dark Sea Grey BS381c/640 (FS36118) applied to the undersurface. Roundels were applied to the top of the left wing, the bottom of the right wing and on both sides of the fuselage. Grey (believed to be RAL7044 grey) color. 5X series two digit identification numbers were applied to the fuselage.



Above: Ouragan no.49 - is one of thirty Hornet squadron Ouragans to have participated in the October 29, 1956 war. Soon after the war, the un painted aluminum Ouragans were adorned with a large shark mouth motif to help differentiate them from Egyptian MiG-15's and MiG-17's. During the Suez campaign, Hornet squadron Ouragans accounted for the destruction of 20 tanks, 57 armored pieces and two MiG-15's.

Right: On the eve of the October 29, 1956 Suez War, the IAF had two P-51D Mustang squadrons operational, the yellow spinner Scorpion squadron with 13 airplanes and the red spinner Flying Wing squadron with 16. In the afternoon hours of October 29th, four Flying Wing squadron Mustangs crossed over Egyptian lines into the Sinai desert and cut the phone lines connecting the Egyptian army troops with their headquarters in Egypt. In the eight days of fighting that followed, thirteen of the IAF's operational Mustangs were hit while carrying out the ground attack mission, with only four being repairable. Several months after the war, the Scorpion squadron was closed and all remaining Mustangs transferred to the Flying Wing squadron to serve in secondary flying rolls until they were finally retired from service on January 15, 1961.



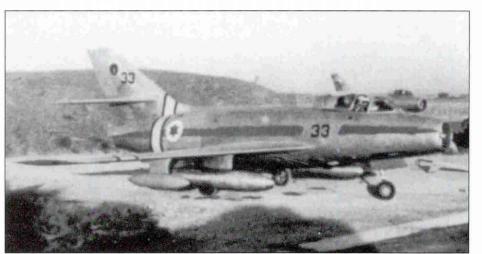




Upper Left: Meteor NF.13 no.52 - On the eve of the Suez War, October 28/29, 1956 Major Yoash Tzidon and his back seat radar operator downed an Egyptian IL-14 transport that was making its way from Syrian to Egypt. In this transport were generals from the Egyptian army high command sent to coordinate strikes against Israel with the Syrian high command.

Lower Left: Fourteen de-navalized TR Mk.33 Mosquitoes entered service with the IAF between 1954 and 1955. With the Egyptian air threat eliminated on the first day of the Suez War, Mosquitoes were sent on a search and destroy missions against Egyptian armor. Once the Egyptian Armor columns in the vicinity of Sharem-El-Sheich were spotted Mosquitoes flying round the clock missions dropped 60 tons of bombs, rockets and machine gun fire relentlessly for four days without losing a single aircraft. The key to the Mosquito's success was its wooden fuselage. Egyptian AAA shells fused to explode on impact with aluminum fuselage skin just passed through the Mosquito's wooden airframe. Even the shells that found the Mosquito's engine could not bring it down for it had another, which enabled its crew to return safely to base.

Right: Twenty-four Mystére IV's arrived in Israel between 11 April and 23 May 1956 and were assigned to the First Fighter squadron. Of these, only 16 aircraft participated in the October 1956 Suez War due to pilot shortage. 101 squadron Mystére IV's accounted for 7 Egyptian aircraft downed during the Suez Campaign; four de Havilland Vampires, two MiG-15's and a single MiG-17. Mystére no.33 flown by Lieutenant Aharon "Yalo" Shavit downed two Egyptian Vampires on a single mission that took place on October 31, 1956. Note that Mystére IV no.33 is adorned with a red fuselage stripe, red wing tips, and early yellow and black Suez Campaign identification stripes.





Above: During the Suez war sixteen IAF Dakota transports dropped 400 IDF paratroopers over the strategic Egyptian held Sinai Mitle Pass which was key to reaching the Suez Canal. Newly delivered French Nord Noratlas transports aided in the airlift of war material into the Sinai. The Dakota and Noratlas were painted in brown and blue over grey finish, which was also applied to other ground support aircraft during the war.





Above: A Suez War Meteor F.8 First Jet squadron line up with airplanes 04 and 06 in the foreground. Meteor 06 is seen with a black aft fuselage and wing identification bands applied where as Meteor 04 has only aft fuselage band applied. The wing bands were applied diagonally, starting at the wing leading edge outboard of the wing walkway boundaries and ending at the wing rear spar ahead of the ailerons. Additional Meteor F.8's seen with wing bands were 02 and 11.

Left: The pilot of this weathered High Speed Silver painted Meteor F.8 no.08 is seen awaiting a Suez War mission in this close-up view of the Meteor's nose section. The First Jet squadron insignia was applied to both sides of the nose on single seat F.8 airplanes, but FP.9 versions that had the camera openings at these locations, when applied had their squadron insignia painted on the vertical fin, above the horizontal stabilizer.



Above: The Anglo – French – Israeli Suez Campaign was divided into two phases. During the first phase, which lasted from 28 – 29 October 1956, the IDF was to occupy the Sinai giving legitimacy for British and French intervention. For the initial phase, IAF airplanes were painted with a wide yellow band with two black stripes as seen applied to the Mosquito and Mystére on the preceding page. Ouragan no.45 is seen armed with eight air to ground rockets and a pair of napalm canisters under its wings. Note the lack of (Hornet) squadron insignia and the application of roundels on the top and bottom of both wings and the aft fuselage.

1957-1967 & the Six-Day War

sraeli occupation of the Sinai was short lived with the U.S. and the Soviet Union demanding the withdrawal of IDF, British and French forces out of Egypt. Between 1956 and 1967 the countries surrounding Israel formed a confederation called the United Arab Republic consisted of Egypt, Syria and Iraq with Jordan and Lebanon being loosely tied by agreement. At this time Palestinians were trained in guerrilla warfare by Egypt and formed the Fatach organization (widely known as the PLO). During the spring and summer of 1966, Syrian began diverting the waters of the Hatzbani river in Lebanon and the Banias in Syria away from the Jordan River in an effort aimed at denying drinking water to the population of Israel. On July 14, 1966 IAF jets bombed Syrian engineering vehicles conducting the diversion of the waterways and in the process downed the first ever MiG-21F-13. Following this event, Fatach terrorists conduct raids into Israel from along the border with Jordan. In the air, Egyptian and Syrian aircraft routinely violate Israeli air space probing IAF reaction and photographing IDF installations. The IAF decides to end Syrian incursions into northern Israel and down seven Syrian MiG-21F-13's on April 7, 1967. To counter Israeli "belligerence" against Syria, on May 18, 1967 Egyptian president Jamal Abdel Nasser called for the UN peace keeping forces in the Sinai to leave, this was followed a week later by the closure of Red Sea waterway leading to the Israeli port of Eilat. Repeat diplomatic efforts to persuade Egypt to change its policy fell

on deft ears, as Egyptian rhetoric and incitement of its population grew stronger, war was only a matter time. At 7:45 June 5, 1967 nne hundred and eighty three Israeli Air Force fighter planes conducted simultaneous strikes on eleven Egyptian air bases in the Sinai and within Egypt, destroying 197 aircraft on the first wave of attack. Two additional waves were launched that day against Egypt, with the later including air bases in Syria, Jordan and Iraq. In the first 60 hours of the Six-Day War the IAF destroyed 452 fighters and bombers, 58 of which in air combat for the loss of a dozen IAF fighters. By the end of six days of fighting, the IDF held the entire Sinai desert, east of the Suez Canal; the Gaza Strip, the Golan Heights, which included the Banias fresh water river; and the West Bank, including East Jerusalem held by Jordan since the 1948 war. The basic RAL5008 blue, RAL8008 brown and RAL7044 undersurface grey used between 1956 and 1970 had a high gloss finish applied prior to the 1967 war. This high gloss finish darkened the basic paint hues. Over time, weathering faded the upper surface colors to matt (flat) and changed their hues such as FS30145 brown, FS30215 brown, and FS25051 blue. The undersurface grey was not always adhered to and FS16440 and FS36373 color samples from that time period have been seen.

I received the opportunity to confirm the actual colors applied to the Six-Day War jets only in August of 2004. Thanks to a U.S. Army soldier who found an IAF Vautour wing section in one of Sadam's castles.

This wing section was returned to the commander of the IAF on August 13, 2004. I had the opportunity to identify the colors on the perfectly preserved wing panel and matched them to currently available colors. The Star of David on the Vautour was found to match RAL5001 blue. In my evaluation of the wing panel colors, I was extremely surprised to learn that the colors on the Vautour wing panel matched perfectly with Humbrol color standards. The upper surface blue was slightly yellower than RAL5008 Graublau, yet matched Humbrol 134 blue perfectly. The upper surface brown matched Humbrol 29 brown (termed as coffee brown IAF by mechanics). No exact brown color match was found in known color standards with RAL8008 being slightly dark and a bit orange in comparison, while FS30118 was found to be similar in hue but a bit too green in color. At some point prior to the Six-Day War, jet fighters painted by Israel Aircraft Industries were painted with RAL 8008 Olivbraun. From other sources, metal models given as gifts & painted in the actual colors at the base, the undersurface grey was known to be RAL7044 Seidengrau which matches FS36622 light grey. The hard edge masked upper surface pattern had four variations. A standard scheme, reversed standard scheme (blue painted areas painted brown & vice verse), mirror of standard scheme and reversed mirror scheme. For the sake of consistency, RAL5008, RAL8008 and RAL7044 are quoted in the photo captions



Above Left: Mystére IV no.28 in a natural metal finish with red fuselage stripe and wingtip fairings is seen rotating for take-off from Hatzor air base in central Israel. Large red fuselage markings were applied to IAF natural metal Mystéres and Super Mystéres in order to help identify them in the air when fighting against natural metal Arab MiG-15, MiG-17 and MiG-19 aircraft.



Above Right: MiG killer Ouragan no.28 is seen in a 1958 vintage RAL8008 brown, RAL5008 blue over RAL7044 grey scheme applied to the Ouragans soon after the Valley squadron assumed the air intercept roll alongside the First Fighter squadron. The Hornet squadron's gaudy shark mouth motif was painted over once the brown & blue over grey scheme was applied during the 1961-1962 time period.

Right: Mystére IV no.32 - The Valley squadron retired their wooden Mosquitoes immediately following the Suez War and rushed into service second hand red zig-zag adorned French air force EC1/12 "Cambresis" squadron Mystére IV's. Suez War roundel application was limited to both sides of the aft fuselage atop the right wing and underneath the left wing. Two digit identification numbers were applied only to the nose section.







Above: Super Mystére B.2 was the first European Jet to exceed Mach one in a straight and level flight. Thirty-six Super Mystére B.2's entered IAF service between December 3, 1958 and the end of 1959 with the Scorpion squadron that was closed after the Suez War with the retirement of the P-51D Mustang. As a recognition aid, to differ from the MiG-15/17/19 family of fighters, the French red zigzag arrow fuselage trim was retained on the natural metal airplane as seen on Super Mystére no.31.

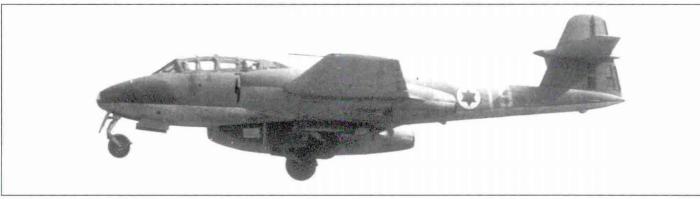
Left: A year after the 1956 Suez War, seven radar equipped Vautour IIN's joined the five Meteor NF.13's of the Bat squadron based at Tel-Nof. These aircraft were assigned the night fighter mission until they were replaced by Mirage IIIc aircraft on March 10, 1964.

Right: The Lycoming 320 - 150 horse power engine Super Cub gradually phased out the Piper Cub in IAF inventory between the years 1957 and 1960. In 1961, these brown and blue over grey aircraft replaced the Boeing Stearman as the IAF's primary trainer and took on the light transport roll from the Cub in the Camel squadron. For the training roll Day Glow Orange adhesive tape stripes were applied to the cowling, wing tips, vertical and horizontal stabilizers instead of the yellow trim that was in use till around 1962.





Left: Thirty-five Dornier Do-27 "Dror" (Sparrow) single engine transport planes entered service with the Flying Camel squadron with the first ten arriving in October 1964. During the 1967 war, the Do-27's were painted in RAL5008 blue, RAL8008 brown and RAL7044 undersurface grey scheme. With the capture of the Sinai desert, Do-27's were painted in standard 1970 camouflage colors to better match the desert topography. The Dror was phased out of service in 1981 as the number of Cessna model U-206 and Dornier Do-28 reached full strength.

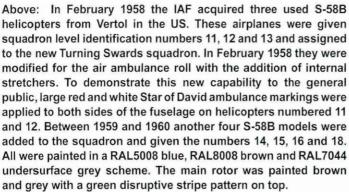


Above: With the addition of the Vautour two engine bomber to the IAF, four additional Meteor trainers were purchased from England in 1958 which were given identification numbers 19, 20, 21 and 23. These trainers combined the engines and tail section of the Meteor F.8 with the forward fuselage of the T.7 thus they were given the unofficial model designation of seven and a half. With the arrival of the Mirage III in 1962, the single seat Meteors were transferred to the Orange Tail squadron to act as advanced trainers and the two seat Meteors were allotted to the Knights of the North squadron that inherited the Bat squadron's night interceptor Vautors. These trainers were painted in a RAL5008 blue, RAL8008 brown and RAL7044 undersurface grey scheme with roundels applied to the fuselage sides, the top of the left wing and the bottom of the right wing. The Meteor trainers were retired from service in February 1970 with the arrival of TA-4J two seat Skyhawk trainers.



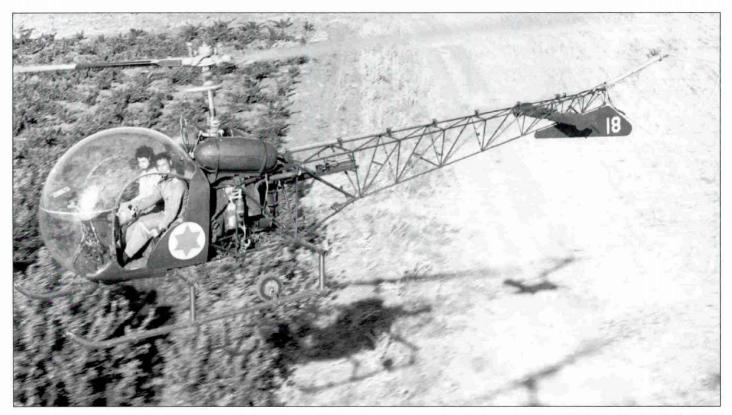
Left: The IAF's transition to an all jet fighter force during second half of the 1950's left the reciprocating engine Harvard advanced trainer inadequate for this roll. On July 7, 1960 the first of 36 IAI built Fouga Magisters were handed over to the IAF. The first pair of Fouga Magister trainers to be taken to the air were numbers 15 and 16 seen here. They were painted in gloss RAL5008 blue, RAL 8008 brown and RAL7044 undersurface grey with FS33637 Trainer Yellow trim as was common to the Harvard and Stearman prior to their retirement in 1962.







Above: Fifteen Sud Aviation Alouette II's of two types entered service with the IAF, models SE-3130 and SE-3180. The first Alouette II was donated to the IAF by a French woman, and entered service with the S-55 squadron in July 1957. The first Alouette II were painted overall RAL5008 blue and given the identification number 03. It had the words "Adonai Iree" (God is Witness) applied to its fuselage, along with a red Star of David signifying its ambulance life saving roll. With the removal from service of the Bell 47 in 1968, additional Alouette II's entered service with the light helicopter transport squadron. With the phase out of the brown and blue over grey after the 1967 war, the Alouette II's were painted overall 34079 dark green with yellow tail rotor and its surrounding frame. The tail rotor blade tips, like those of the Super Ferlon, and the Bell 206 that followed in 1972, were painted in alternating red-white-red.



Above: Seven Agusta-Bell model 47G-2 and six Bell model 47G helicopters were bought from France and delivered to the IAF in 1965. These aircraft were used as primary trainers for pilots destined to fly the S-58 and Super Ferlon helicopters. During the 1967 Six-Day War, these helicopters were used as VIP transports, for surveillance and as air ambulance. On November 2, 1967 a fatal accident occurred in helicopter no.02, where one of the main rotor blades detached in flight and the crew of two lost their lives. This incident led to the removal of the Bell 47 from IAF service in 1968 where the French made Alouette II replaced it. The Bell 47 sported an overall 34084 Olive Drab finish with red fuel tanks and tail boom stabilizer trim. During the 1967 war, the Bell 47's were painted in overall RAL5008 blue that was in use on ground support aircraft up until the early 1970's.



Above: On August 8, 1962 a single Pilatus Turbo Porter PC-6A on 0.02 was given as a gift to the IAF's Flying Camel squadron. This airplane was unique in having a turbo prop, capable of carrying ten passengers or a 2,000 lbs. payload with short take off and landing capability. The airplane suffered from wing fuel leaks that grounded the airplane repeatedly and when the time came in 1964 to select a new light transport to replace the Piper Super Cub, the Do-27 Dror was prefered. The Turbo Porter remained serviceable till a bit after the 1967 war and is currently on display in the IAF Museum. The Turbo Porter was painted overall white with blue trim on the wing tips , vertical fin and horizental stabilizer tips.



Left: As Israel's enemies began equipping with front line Soviet MiG-21F-13 aircraft in the late 1950's, operation "Diamond" was drawn up to obtain such aircraft for evaluation. In January of 1966, a Mossad agent persuaded an Iraqi pilot of Christian faith to defect to Israel in a MiG-21. On August 16, 1966 Monir Radfa landed his natural metal MiG-21F-13 Fishbed C no.534 at the IAF base of Hatzor, as seen in this photo.



Above: The Fouga-Magister peace time pilot training roll was augmented with an emergency war time roll of attack. In November 1961 the Battering Ram reserve pilot squadron formed to operate thirty armed Fouga-Magisters in time of war. For the attach mission each Fouga was fitted with a pair of 7.62mm Browning machine guns and eight wing hard points that could carry either two 50kg bombs or up to 12 air to ground rockets. The RAL5008 blue, RAL8008 brown and RAL7044 undersurface grey camouflage visibility was enhanced with the application of orange self adhesive tape stripes applied to the nose, wing fuel tanks and vertical fin of the Fouga.



Above: The First Fighter squadron was the first IAF squadron to receive the Mirage III on April 7, 1962 and operated the type till the introduction of the Kfir in 1975. The squadron also has the claim of being the first squadron in the world to down a MiG-21 in the Mirage type of fighter as well as owning the two highest scoring Mirage aircraft in the world, numbers 158 and 159. Mirage no.12 is seen in pre-1967 war markings and two digit identification number 12. This aircraft was lost in an accident sometime in 1969 and did not attain any kill marking.



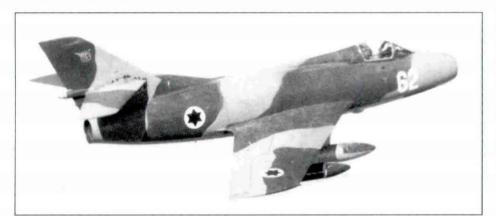
Above: On March 10, 1964 the Bat squadron became the third squadron to operate the Mirage III receiving two reconnaissance aircraft tail numbers 98 and 99. The Bat squadron applied a numeral 7-prefix number to the two-digit aircraft number. As a recognition feature, the highly polished natural metal Mirages had a red chevron applied to the vertical fin, as seen on the squadron's single two seat Mirage IIIB conversion trainer. During the War of Attrition the Mirage squadrons adopted the 1970's standard camouflage to their airplanes and the red chevron was removed. The Bat squadron relinquished their Mirages in October 1970, two months after the end of the War of Attrition to become the IAF's third F-4 Phantom squadron.



Above: Mirage no.28 - On July 7, 1962 the First Jet squadron based at Ramat-David became the second squadron to operate the Mirage Illc. The First Jet squadron natural metal Mirages had a red "spear" applied along the fuselage. The First Jet squadron operated the Mirage for the longest period of time, seventeen years, until receiving the F-16 in July 1980.



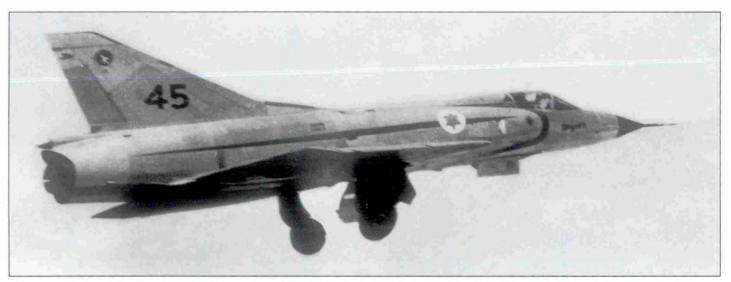
Above: Mystére IV no.10 - Armed with a pair of underwing fuel tanks and six 70 kg "Papam" runway piercing bombs a formation of four Valley squadron Mystére IV's were sent to bomb the Egyptian air base of Kabarit after it was first hit by Super Mystéres of the Scorpion squadron. squadron pilot Asaf Ben-Nun flying Mystére IV no.10 became the first Valley squadron pilot to score an air to air kill by downing an Egyptian MiG-17 Fresco C over the base.



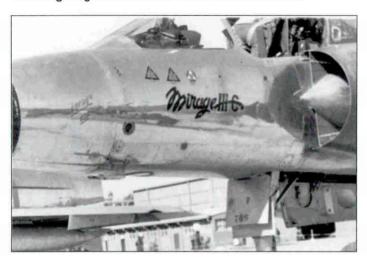
Left: With the introduction of the Mirage Illc into IAF inventory in April 1962, Mystére IV's of the First Fighter squadron were transferred to the Flying Wing squadron. Mystére IV no.62 is seen carrying a pair of "dark shoe polish brown" napalm canisters on its outboard pylons and two 625 liter fuel tanks inboard. Similarly painted Mystére IV no.52 of this squadron downed a Jordanian Hunter on the afternoon of June 5, 1967.



Above: At the outbrake of the June 5, 1967 war, none of the IAF's combat planes had air refueling capability. To prevent the recurrence of the 1948 bombing of civilian centers by Egyptian bombers, the IAF command placed paramount importance on eliminating Egypt's TU-16 Badger bombers on the first wave of attack. The only aircraft in IAF inventory capable of reaching bomber bases deep within Egypt were the twin engined Sud Aviation Vautours. Vautour IIA no.09 (1 being a bogus number) is seen landing with three TU-16 white on red silhouettes painted on its vertical fin.



Above and Lower Left: As all IAF fighters were sent to attack bases in Egypt, Syria and Jordan, each base retained a pair of Mirage IIIC's for base protection. One such Mirage was no.45 of the First Jet squadron. At 2pm of June 5, 1967 Uri Even-Nir was scrambled to intercept Lebanese air force Hawker Hunters attacking the base. The attackers managed to escape yet another Lebanese Hunter was downed over the Bekka Valley. The following day, Yehuda Koren flying Mirage no. 45 downed an Iraqi Hunter and an Iraqi MiG-21F-13 escorting Knights of the North Vautour bombers to H3.





Above: At the outbreak of the June 5, 1967 war, the IAF had 65 operational Mirage fighters. In the first three hours of the Six-Day War the Mirage fighters were used for the ground attack, fitted with a pair of 250kg bombs mounted on its centerline pylon and a full load of 30mm cannon rounds. The Israeli developed Shafrir I air to air missile was not carried on the Mirage during the Six-Day War due to its poor performance. In six days of combat, the IAF's three Mirage squadrons accounted for 48 Arab airplanes destroyed in air combat for the loss of nine of their own.



Above: The key to the success of the IAF in eliminating the Egyptian, Syrian, Jordanian and Iraqi air forces in the opening hours of June 5th, 1967 was the introduction of a "pit stop" method of launching its fighters into combat. The "rapid turn around" as it is known today is seen being practiced by a crew of mechanics re-arming First Jet squadron Mirage IIIc no.750.



Above: Bat squadron Mirage IIIC no.758 is seen in typical quick reaction alert scramble configuration of two 500-liter super sonic fuel tanks and a pair of Shafrir-1 air to air missiles. This photo taken on November 30, 1966 shows Bat squadron Mirage deployed to Israel's southern most air base of Hatzerim in anticipation of air to air combat with Egypt after tensions with Syria escalated.



Above: Mirage IIIc no.52 of the First Fighter squadron is seen with a Matra 530 radar-guided air to air missile attached its centerline pylon. The Matra 530 was designed to down high altitude low maneuverable bombers such as the TU-16 and IL-28 in Arab service and proved useless in air combat against nimble MiG fighters. On November 29, 1966 the IAF attained its only Matra 530 kill (credited to Mirage no.52) when an unlucky Egyptian MiG-19 pilot broke into the flight path of the missile instead of away from it.

Right: Prior to the October 29, 1956 Suez War, the IAF experimented with a brown and blue over grey scheme. The use of blue in the upper surface scheme were adopted to coincide with operation "Moked" (Focus) which entailed forming up over the Mediterranean Sea, away from Egyptian early warning radar, prior to heading into Egypt from different way points. All ground attack jets participating in the Six-Day War namely; Ouragan, Mystére IV, Super Mystére, Vautour and Fouga Magister were painted in gloss hard edge masked colors consisting of RAL8008 brown, RAL5008 blue over RAL7044 grey. In this 1966 photo, Knights of the North Vautour IIA numbers 09, 12 and 18 are on a navigational exercise over the Mediterranean.





Above: During the opening hours of the June 5, 1967 war all available combat airplanes including Mirage Illc interceptors were assigned bombing missions. Only a handful of Mirage Ill's remained behind to guard Israel's air space. The only other fighter not assigned a bombing mission was MiG-21F-13 appropriately identified with a 007-fuselage number. To aid in visual acuity, the MiG-21 was painted with FS12197 red-orange trim. Ironically, to avoid possible fratricide MiG-21 no.007 piloted by the IAF's premiere test pilot Danny Shapira was never scrambled for an intercept.



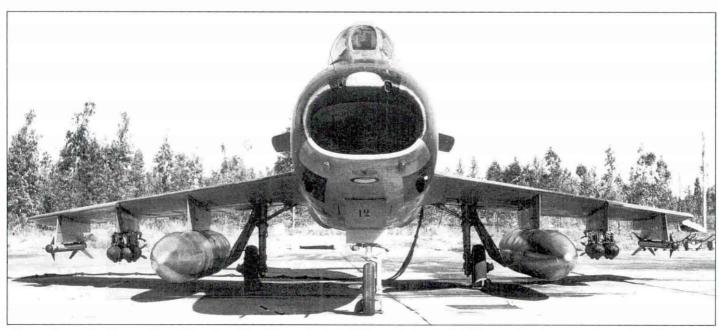
Above Left: Ouragan no.18 - A year after the Suez War, the French air force offered the IAF forty-five French Air Force surplus Ouragans for a bargain price. Their delivery enabled the Orange Tail squadron (orange tail only applied by the squadron on their F-4 Phantoms in 1972 – not on the Ouragan) to retire the Meteor from service and use the Ouragan in the advanced pilot training roll. During the Six-Day War, the squadron's sixteen Ouragan fighters operated out of Ben-Gurion airport. During the opening hours of the war, Orange Tail and Hornet squadron Ouragans attacked the Egyptian air force Sinai forward air bases of El-Ahrish and Bair-Tamda and for the rest of the war they were used for the ground attack roll.

Above Right: Ouragan no.94 of the Orange Tail squadron is seen armed with four 20mm guns, a pair of 250 kg or 500 kg bombs and six 105 mm rockets. Other less frequently used armament consisted of a pair of "shoe polish brown" painted fin less napalm canisters and a pair of nineteen 86 mm rocket pods.

Right: At the outbreak of the June 5, 1967 war, the IAF commandeered three French Air Force Super Mystéres' awaiting overhaul at IAI. These aircraft numbered, 35, 75 and 94 had two digit ID numbers applied to the natural metal airframe which were masked prior to having a brown & blue over grey scheme applied. The aircraft is seen fitted with a pair of 1300 liter fuel tanks on the inboard pylons and 250 kg bombs on the outboard wing pylons.







Above: Super Mystére no.12 - With entry of the Mirage IIIc into IAF service in April 1962, the Mystére was relegated to the ground attack roll and given a gloss hard edge mask camoflage consisting of RAL8008 brown, RAL5008 blue over RAL7044 grey. This Super Mystére is shown fitted with a pair of Shafrir I air to air missiles, four 70 kg runway piercing "Papam" bombs and a pair of 1300 liter fuel tanks.



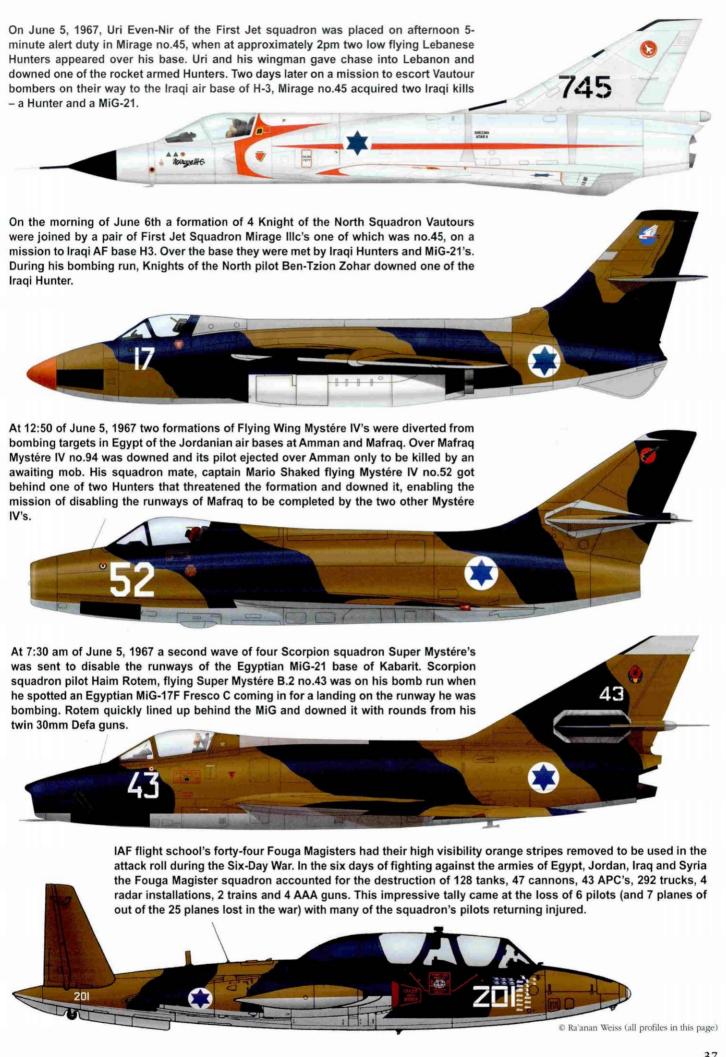
Above: Fouga Magister no.216 is seen taxing for take off on the morning of June 5, 1967. At the opening hours of the war, forty-four IAF flight school Fougas were launched against Egyptian artillery pieces and radar installations located along the Gaza Strip and the Sinai coast. For this offensive roll, the trainers stripes were removed, twin 7.62 mm nose guns armed and twelve rockets fitted to each aircraft. The similarity between the rockets seen on this Fouga and those seen on Egyptian MiG-17 aircraft is no coincidence, they are Egyptian rockets and rails captured by the IDF during the 1956 Suez War and put to use during the 1967 war.

Right: H-34G no.05 - Twenty-two military versions of the Sikorski H-34G were acquired for the IAF by the West German government as war reparations to the WWII Holocaust survivors. These helicopters were delivered to the Turning Sword squadron in an overall RAL6014 (FS14064) green color scheme, which were over sprayed locally in patches of RAL8008 brown. The main rotor was painted FS34087 olive drab and the tail rotor in black with red-white-red warning tips.

Below: Super Ferlon no.09 - The IAF's first heavy lift helicopter was the Sud Aviation Super Ferlon of which the first of a dozen entered service on April 20, 1966. They were painted in an FS33448 Stone Yellow, FS34102 Green over FS35526 color scheme with a Star of David insignia repeated underneath the horizontal stabilizer.







1967-1970 & the War of Attrition

he brown and blue over grey scheme applied to ground support aircraft were no longer appropriate for the vast expanses of the Sinai terrain. During a July 1967 public display commemorating the victory of the Six-Day War, a single Hornet squadron Ouragan was revealed to the general public in new "1970's desert colors" of RAL1001 Beige (~FS33531 sand), RAL6011 Resedagrun (~FS34227 green) and RAL8024 Beigebraun (~FS30219 brown) on top with RAL7035 Lichtgrau (~FS35622 light blue) underneath. A-4H Skyhawks being built for Israel by Douglas at the time, arrived in the nearest interpretation of US Federal Standard 595 colors of FS33531 sand, FS34258 green and FS30219 brown on top with FS35662 light blue underneath. The purchase of the F-4E Phantom two years later made use of the same Federal Standard 595 colors as those applied to the Skyhawk with the exception of the green that was changed to FS34227. These new colors, manufactured locally by Tambur Paints of Israel, became the new standard colors to be used on all IAF 1970's vintage aircraft until their removal from service. The two-digit identification system became inadequate as the number of an airplane type (A-4 & F-4E) exceeded 100. To each two digit, a squadron prefix number was added. A short time after the Six-Day War, hostilities erupted in earnest along the border with Egypt. The new round of fighting was to be named the "War of Attrition". To counter Egyptian shelling along the canal, daily reprisal raids were conducted using IAF attack planes as "flying artillery". To counter Israeli attack planes, SAM-2 radar guided surface to air missiles were introduced along the front.

To avoid radar detection, Israeli fighters flew at very low altitude, popping up for the bomb toss just prior to reaching their target. As the war drew on, Soviet advisors were called in by Egypt to operate new SAM-3 and MiG-21MF Fishbed J fighters. The new SAM-3 umbrella set up by the Russians along the Suez Canal projected beyond the '67 War cease-fire lines, well inside Israeli air space. This new SAM threat forced IAF Mirage and new Nesher (Israel Aircraft Industries built Mirage V) interceptors to fly "nap of the earth" for which they too received the "1970's desert colors". To counter the Soviet technological advantage, the IAF was granted the purchase of the long sought after F-4E Phantom II that were accepted into service on September 5, 1969 in a formal ceremony presided over by Prime Minister Golda Meir and Defense

Minister Moshe Dayan. Between February and August of 1970 Soviet technicians and pilots took an active part in the fighting along the Suez Canal. Rolling in new SAM-3 missiles close to the Suez Canal and flying intercept missions using new MiG-21MF Fishbed J fighters. Damage to an IAF A-4H Skyhawk on July 25, 1970 brought the Israeli government headed by Golda Meir to the realization that Soviet intervention must end immediately or escalation would be hard to curtail. On July 30, 1970 the IAF laid a trap for the Soviet pilots downing five MiG-21's in air combat over the dogfight arena over the Sinai nicknamed "Texas". U.S. condemnation of Soviet actions in the Mid-East brought forth a cease-fire that put to an end the direct Soviet intervention in the fighting as well as ended the 1,000 Day War of Attrition.



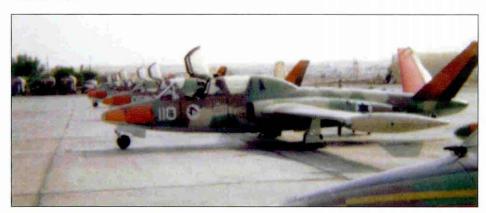
Above: After the 1956 Suez War, Egypt, Syria and Iraq embarked on a massive arms buildup funded by the Soviet Union. In order to keep Saudi Arabia and Jordan within the West's circle of influence, the US lifted its embargo on selling armed to the Middle East, which was imposed by the Harry S. Truman administration in 1948. With the sale of Hawk surface to air missiles to Saudi Arabia and F-104A Starfighters to Jordan, on March 18, 1966 Israel was able to sign of 48 down graded A-4E aircraft. The IAF's request for a communication antenna to be fitted a top the vertical fin of gave IAF Skyhawks their unique squared off shape and an A-4H designation.



Above: Knights of the North squadron Vautour no.20 is seen in a 1970's standard color scheme after being overhauled at Israel Aircraft Industries. The nickname "Yaguar" (Jaguar) is seen applied to both the left side of the nose is also repeated on the right. During the 1969-1971 War of Attrition, Vautors provided combat support missions such as Electronic Intelligence, recognizance, and various missile testing and evaluation rolls.

Right: The Ouragan was the first IAF aircraft to be painted in new post-67 war upper surface colors of RAL1001 Beige (~FS33531 sand), RAL6011 Resedagrun (~FS34227 green), RAL8024 Beigebraun (~FS30219 tan) and undersurface color of RAL7035 Lichtgrau (~FS35622 light blue). Orange tail and Hornet squadron Ouragans participated in War of Attrition missions until they were replaced by F-4E Phantoms and IAI Nesher (Mirage V) aircraft respectively. The Ouragan was finally retired in January 1973, after 17 years of service with the IAF.





Left: With the end of the Six-Day War, the Fouga Magisters resumed their peace time roll of pilot training. The Fougas were painted in post-67 desert colors and had FS12197 orange removable tape identification stripes applied. The Fougas retained this scheme until 1981 when they were replaced by IAI Tzukit airframes painted in new gloss white and FS12197 orange trim (see pg.57).

Right: Super Mystére no.25 is seen in post-67 war desert scheme with a pair of unpainted 1300 liter fuel tanks under its wings. Super Mystére aircraft upgraded by Israel Aircraft Industries with GE J52 Skyhawk engines retained their post-67 war colors and camouflage after they were modified to Sa'ar standards (see pages 44, 45 and 49). Both the Super Mystére and Sa'ar served in the Scorpion squadron. The Scorpion squadron operated the Super Mystére B.2 and Sa'ar upgraded engine variant for nearly 17 years, until the type was replaced by F-4E Phantoms in March 1975.





Above: With the delivery of the A-4H Skyhawk to the Valley squadron beginning on December 31, 1967 all Mystére IV's were transferred to the Flying Wing squadron who operated them in the new post-67 war scheme until their retirement on March 18, 1971. Mystére no.52 had a Jordanian kill marking above the nose number and similarly camouflaged Mystére 44 had an Egyptian kill marking, both dating back to the Six-Day War. On the vertical fin, below the squadron insignia, Flying Wing squadron Mystére IVs' had Suez and Six-Day War campaign ribbons applied.



Left: Mirage Illc no.59 is seen with a bogus no.2 prefix number applied. In this photo the IAF's highest scoring Mirage with ten kills attained between 14 April, 1966 and the summer of 1970. Mirage 59's first nine kills were documented in a July 1970 issue of IAF magazine as follows: a Syrian MiG-21F-13, followed by Egyptian IL-14, MiG-19, MiG-17, MiG-21, Su-7 and three MiG-21's in separate missions. First Fighter squadron Mirage 59 had the natural metal finish applied well into the War of Attrition as seen by the AIM-9D sidewinder rails introduced into IAF service with the delivery of the F-4 Phantom.



Above: Bat squadron Mirage IIIc no.19 is seen at IAI flight line after being painted in post-67 war colors of RAL1001 Beige (~FS33531 sand), RAL6011 Resedagrun (~FS34227 green), RAL8024 Beigebraun (~FS30219 tan) and RAL7035 Lichtgrau (~FS35662 light blue) undersurface. Egypt's introduction of the SAM-2 and SAM-3 high and medium altitude surface to air missiles along the Suez front during the July 1967 - August 1970 War of Attrition forced the IAF to fly a nap of the earth to avoid radar detection.

Below: Post 1967 war camouflaged Mirage no.179 was the highest scoring Mirage of the First Jet squadron, attaining 10 kills by the end of the Yom-Kippur War. Mirage 179 had its 1970's desert colors applied until it was sold to Argentina in 1982.

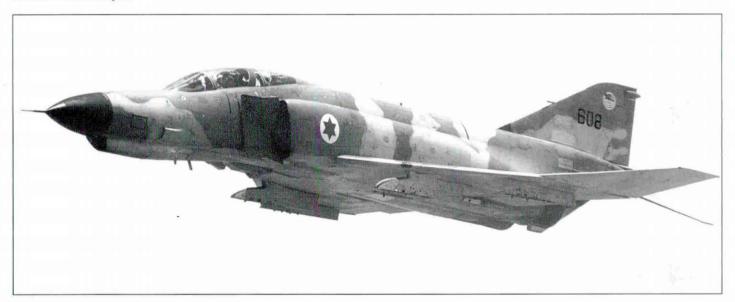




Above: First Jet squadron Mirage Illc no.749 is seen painted in the final version of the post-67 war camouflage pattern that eliminated the brown ahead of the windshield. At the outbreak of the Yom-Kippur War, all IAF Mirage and Nesher interceptors had the same camouflage pattern applied.



Above: Only a year following the June 1967 war Israel had to face a new war on the Egyptian and Syrian fronts. This 1000 day war was to be known as the War of Attrition which lasted from July 20, 1969 to August 8, 1970. French embargo on the delivery of 50 Mirage V fighter-bombers led the Israeli government to request the sale of F-4 Phantoms from the US. On January 7, 1968 President Lyndon Johnson approved the sale of 44 F-4E and 6 RF-4C Phantoms to the IAF. The first "Peace Echo I" McDonnell Douglas F-4E Phantoms were accepted into service on September 5, 1969 in a formal ceremony presided over by Prime Minister Golda Meir and Defense Minister Moshe Dayan.



Above: The first kill for IAF F-4's came within three months of operation, on November 11, 1969 the crew of Ehud Chenkin and Eyal Achikar flying "Ahat" squadron F-4E number 608 downed and Egyptian MiG-21PF with an AIM-9B Sidewinder IR guided air to air missile. IAF F-4E's retained their original camouflage scheme of FS33531 sand, FS34227 green, FS30219 brown over FS35622 light blue throughout their 35 years of service with the IAF. Note that War of Attrition vintage "Ahat" squadron F-4E's carried the Star of David roundel only under the right wing and atop the left wing.





Above: F-4E no.183 of the Hammer squadron is credited with downing a Soviet piloted MiG-21MF on July 30, 1970. In this engagment two of the five MiG's downed were credited to Hammer squadron Phantoms. This aireal engagment with the Russians ended the War of Attrition.

Left: F-4E no.35 of the Hammer squadron is seen rotating for take off on a January 28, 1969 bombing mission. It was loaded with Mk.82 - 500 lbs "slicks" on the outboard pylon, Mk.117 - 750 lbs bombs on the inboard pylon and a centerline 600 gallon fuel tank.



Above: The first pair of CH-53D Stallion helicopters arrived in Israel in October 1969, and joined the Super Ferlons of the First Heavy Lift Helicopter squadron. On the night of December 26/27, 1969 the first two Yassur (Stallion in Hebrew) helicopters, numbered 31 and 33, were used to steal a Soviet SAM-2 radar and its control caravan stationed on the Egyptian side of the Suez Canal. At the closing stages of the Yom-Kippur War, the heavy lift capability of the CH-53D enabled the IDF to retake the Hermon mountain top that to this day is known as the eyes and ears of Israel to the North.

Right: Eleven Agusta-Bell built civilian models of the UH-1D (AB205) arrived in Israel on December 15, 1967, with first flight taking place two weeks later. The initial batch of Hueys replaced the S-58D's of the Turning Sward squadron. On October 6, 1968 the first 6 Bell model 205A reached Israel directly from the US and enabled the forming of a Southern Medium Lift Helicopter squadron. During the 1969-1971 War of Attrition, the Bell 205 was used extensively along the Jordanian border to combat PLO terrorists attempting to enter Israel. After the Yom-Kippur War, a 1975 IAF command decision replaced the Huey with its twin engine successor the Bell 212. The Huey was painted in 1970's desert colors of FS33531 sand, FS30219 brown and FS34227 green over FS35662 light blue. Initial examples had their camouflage pattern hard edge masked, and by 1973 the camouflage pattern was applied free hand using a spray gun.





Left: Fifteen Dornier Do-28B1/B2 "Agur" (Crane) were introduced to Camel squadron service in February 1971. The Do-28 shared common fuselage and engine as the single engine Do-27 also operated by the squadron. The Do-27 and Do-28 shared a common 1970's desert color scheme and white identification numerals applied to the aft fuselage and atop the left and bottom right wing surfaces. In the second half of the 1980's the multi color camouflage was replaced with the Helicopter brown over Haze grey camouflage shown on page 75.



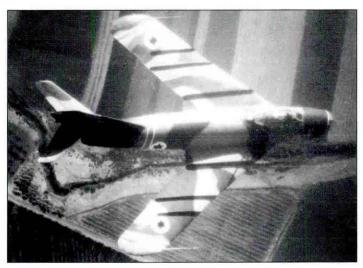
Above: Five Boeing model B-377-10-29 Stratocruisers were purchased from Pan American World Airways by IAI and converted to heavy transports by enabling the empenage section of the fuselage to be opened. A further batch of nine Boeing model (K) C-97G Stratofraighters were purchased in the US after they were retired from USAF service and had their refueling capability striped. The first C-97G reverted to the air-refueling roll by IAI was airplane 4X-FPS no.37. On June 6, 1968 IAI conducted compatibility trials with Valley squadron A-4H Skyhawks no.17 and no.34 to test the operational capability of the aircraft with the addition of external wingtip mounted Sargent Fletcher hose & drogue pods. Stratofraighter converted tankers were painted white with a FS35090 blue (the same blue as the roundel Shield of David) cheat line above the passenger window line. Below the cheat line the fuselage and wing top surface remained natural metal. Underneath the wing and the lower fuselage were painted FS16492 Boeing Grey. The civilian registration number 4X-FPS was applied atop the right wing and bottom left, with the Shield of David roundels applied to the opposite wing.





Above: On May 12, 1970 A-4H no.03 of the Valley squadron became the only IAF Skyhawk to be credited with air to air kills. Squadron commander Ezra Baban and his wingman were sent to clear a combat zone from enemy armored vehicles in the heart of the PLO Fatach Land bordering Israel, Syria and Lebanon. For the mission each aircraft was fitted with a nineteen Zuni rocket pods under each of the aircraft's 5 pylons. Awaiting strike coordinates, the Skyhawk pair spotted a pair of Syrian MiG-17 Fresco C's underneath them. Baban engaged the trailing MiG and vaporized him using a salvo of 38 rockets fired from two of the rocket pods. He downed the second MiG-17 of the mission using his aircraft's twin 30mm Defa guns, which were unique to A-4H no.03 at the time of the kill.





Above Left & Right: In the morning hours of August 12, 1968 Syrian pilots captain Walid Adham and lieutenant Radfan Rifani erroneously landed their MiG-17F Fresco C's at the deserted Israeli air strip of Megido, just south of the Lebanese border. The IAF returned the young pilots to Syria but the MiG's were used for evaluation by both the IAF and USAF. The MiG-17F used by the IAF's premiere test pilot Danny Shapira had its Syrian markings painted over and red & white trim applied to the wings, rudder and intake; with the identification number 02 applied in white to the nose. The Syrian MiG-17F's were painted in British Standard colors of BS381c/641 (FS34086) Dark Green, BS381c/361 (FS30475) Light Stone, and BS381c/697 (FS35526) Light Admiralty Grey underneath. Right: A-4H no.01 (BuNo.155242) was the first A-4H built for the IAF. The Valley squadron was chosen as the first squadron to operate the A-4 Skyhawk, dubbed "Ahit" by the IAF. The first flight of the A-4H over Israel took place on January 1st, 1968, with first combat use occurring on February 15th of that year. The A-4H and all subsequent A-4 Skyhawks to be built for the IAF by Douglas were painted FS33531 sand, FS30219 tan and FS34258 green with the undersurface painted FS35622 light blue.

Below: A-4H no.292 is photographed after being fitted with a HUD and "Crystal" navigation-attack computer housed in an external avionics hump. The new HUD enabled the use of IR guided Shafrir II air to air missiles mounted to the aircraft's external pylons. Prior to the 1973 war A-4H Skyhawks were given a 1XX nose number which were chagned to a 2XX number after the Yom-Kippur War.







Left: During 1972, a series of improvements were introduced to Israeli Skyhawks in order to bring them up to A-4N standards. The Israel Aircraft Industries modification package included the fit of a HUD, INS and new weapons aiming computer and the replacement of the 9,300 Ibs thrust J52-P-8A engine with a more powerful 11,200 Ibs thrust J52-P-408 engine and widened intakes to supply the required additional airflow. The engines removed from the early Skyhawks were overhauled and installed in upgraded Super Mystére B.2 airframes and was given the name SAAR by the IAF.

1970-1973 & the Yom-Kippur War

ith the death of Egyptian president Jamal Abdel Nasser on September 29, 1970 the new Egyptian leader Anwar Sadat vowed that "the land taken from Egypt by force will only be returned by force". The stage was set for the next round of fighting. On September 13, 1973 IAF jets on patrol over the Syrian Mediterranean coast were drawn into a fight with Syrian fighters. In the dogfight that ensued, 12 Syrian MiG-21's were downed for the loss of a single IAF Mirage fighter. Facing such humiliation at the hands of Israel, Syrian leader Hafez al-Assad pushed Sadat to take action. At 2pm of Saturday, October 6, 1973 Yom-Kippur the combined forces of Egypt and Syria crossed over the 1967 war cease-fire lines. IAF fighters scrambled to strike against the Arab ground forces were mangled by new radar guided ZSU-23 mobile "Gun-Dish" 23mm AAA guns, new SAM-6 Gainful radar guided low and medium altitude missiles and new shoulder fired infrared guided SAM-7 "Strella" (NATO code name Grail) missiles. The low altitude nap of the earth flight profile that saved IAF jets during the War of Attrition now became the IAF's Achilles heal. With no effective ECM to counter the new Soviet weapons, the IAF lost 102 of its fighter planes in the first week of the war; 32 F-4E's, 53 A-4's, 6 SAAR and 11 Mirage III/V aircraft. Repeated attacks on Egyptian SAM sights in the area of Port Said opened a SAM free corridor for Israeli fighters from which they could attack the Egyptian delta and put the Egyptian Air Force on the defensive. The October 14, 1973 introduction of Libyan Mirage V fighters in the bombing effort against IDF troops in the Sinai required IAF delta winged Mirage and Nesher fighters to be painted with large Insignia Yellow (FS33538) and black triangles on the wings and vertical fins. With Skyhawk engine equipped Super Mystére (SAAR) - MiG-17 & 19 look alike receiving a similar yellow and black trapeze identification markings. Richard M. Nixon answered Golda Mair's plea for emergency aid and on October 12th, USAF MAC "Nickel Grass" Operation was set into motion. The operation, which lasted until October 30th, provided the IAF new ECM and flare dispensers for self protection and

new precision guide optical glide bombs (HOBO and Walleye), optically guided AGM-65 "Maverick" and radar homing AGM-45 "Shrike" missiles. The new precision guided weapons and new ECM equipment enabled the IDF to turn the tide against the Arabs. By the seventeenth day of fighting (Oct.22) the Israeli Army pushed Syrian forces out of the Hermon Mountain and by the end of the following day surrounded the Egyptian third army in the Sinai. In the 18 days of the Yom-Kippur War, the IDF forced the combined armies of Egypt and Syria along with pro Arab volunteers from as far as North Korea, Pakistan, Morocco, Algeria, Libya, Iraq, Jordan and Lebanon back behind the 1967 war cease fire lines.





Above: Photographed during the 1973 war, Nesher no.61 was based at the Sinai base of Refidim when the October 6, 1973 war broke out. Refidim was tasked with providing top cover for airplanes heading to or returning from Egypt. Pilots from the Hornet squadron and the First Fighter squadron shared mounts while on weekly rotation at this desert airstrip. One such pilot, Giora Epstine attained 8 of his 17 kills on Nesher number 61 making it the Nesher with the largest number of kills – twelve (see page 50).

Scorpion squadron no.80, equipped with Atar 101G engines optimized for the air intercept roll were refitted with Skyhawk J52-P-8A engines that were 22% lighter, offered 24% higher thrust while reducing fuel consumption by 22%. Twenty-six Scorpion squadron Super Mystére due for engine overhaul were rotated through IAI facilities between December 1969 and June 1972. Additional wing strengthening enabled the reengined Super Mystére to carry a heavier wing load including a pair of Safrir II air to air missiles mounted on inboard wing root pylons. The first combat mission for the re-engined Super Mystére, dubbed "Saar" took place late February 1971 against PLO forces in Southern Lebanon.



Above: C-130H no.06/4X-FBB - With the US government lifting of the embargo on the supply of arms to Israel just prior to the 1967 war, the IAF sought to supplement its existing fleet of Boeing Stratocruisers with rough field take off and landing capable C-130 Hercules transports. Two C-130H examples were purchased during the War of Attrition with the first no.02/4X-FBA arriving on October 27, 1971 and the second no.06/4X-FBB arriving the following month. During the October 1973 war, the need for heavy lift aircraft capable of reaching the Egyptian front lines became critical and the Israeli government requested immediate delivery of 12 additional Hercules transports. Twelve such aircraft were supplied, and were pressed into service in their original USAF South East Asian tactical scheme colors. A further batch of eight new built C-130H and two KC-130H Hercules aircraft were supplied to Israel between May 1974 and November 1976. They were to be operated by two squadrons, the Elephant squadron (previously operated the Nord Noratlas) and a new squadron that adopted a black bird on a yellow background circle for its insignia. The camouflage pattern and colors remained the same throughout the aircraft service with the IAF, making use of FS33531 sand, FS30219 brown, FS34227 green over FS35622 light blue. Civilian 4X codes were applied to the vertical fin, bottom left and top right wing surfaces until the late 1990.



Left: The first A-4N version of the Skyhawk entered service with the Dragon squadron on June 8, 1972 and was given the identification number 322. Note the difference between the FS34258 green used by McDonnell Douglas on the A-4N and the A-4H and the green used in Israel by the IAF and IAI, which was FS34227. During the Yom-Kippur War, the Dragon squadron was the only IAF squadron to operate the A-4N.

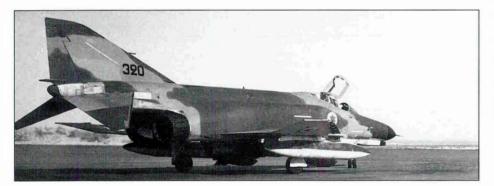
Below: Five months after August 7, 1970 cease fire which ended the War of Attrition with Egypt, the IAF received 42 F-4E and 6 RF-4E's with RF-4C nose sections Phantom II's as part of Peace Echo IV arms aid package. These additional Phantoms enabled the Bat squadron to relinquish their Mirage IIIC's to the First Jet squadron, and the Orange Tail squadron to retire their 1960's vintage Ouragans.





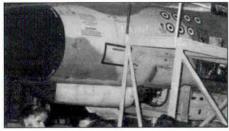
Above: Ahat squadron F-4E no.620 is seen taking off on a wartime mission armed with an asymmetrical load of eight M117-750 lbs. bombs, a single AIM-9D Sidewinder, a pair of (FS34079 green over FS36622 grey) 370 gallon external fuel tanks, and an early version of the ALQ-101 ECM pod. Kornss 620 is know to have an Egyptian MiG-21 kill to its credit, attained on October 11, 1973 by Ahat crew of Peled and Talmon. During the 1973 war, the Ahat squadron bore the brunt of F-4 losses losing a third of their airplanes and aircrew in the first several days of the war.





Left: F-4E no.179 of the Orange Tail squadron retired their Ouragans in favor of F-4E Phantoms on December 10, 1971 that were adorned with an FS12197 redorange rudder. F-4E no.179 is seen armed for a 1973 war mission fitted with an ALQ-87 ECM pod on the fwd left Sparrow missile bay, a pair of AIM-9D Sidewinders on the left inboard wing pylon, three Mk.117-750lbs bombs on the right inboard wing pylon, five Mk.117-750lbs bombs on the centerline bomb rack and a pair of 370 gallon fuel tanks on the outboard pylons. Most IAF Phantoms carried AIM-7F Sparrow radar guided missiles only on the aft Sparrow missile bays which are not visible in this photo. During the 1973 Yom-Kippur War, pilots of the Orange Tail squadron downed 32 Arab aircraft for no loss of their own.

Above: On October 12, 1973 US president Richard M. Nixon approved the emergency wartime transfer of war material to Israel under the code name "Nickel Grass". To make up for F-4E attrition losses, 36 TISO equipped F-4E's were transferred from the 4th and 401 TFW directly to IAF Phantom squadrons. In this photo, Orange Tail squadron F-4E no.320 laden with 750 lb. bombs is awaiting take off. All "Toads", as the USAF camouflaged F-4's were nicknamed, were given 3XX tail numbers were pressed into service in their original US colors of FS34079 dark green, FS34102 medium green, FS30219 brown and FS36622 grey.





Above: Ahat ("The One") squadron F-4E no.609 (Peace Echo I/F-4E block 40 no. 68-0470) holds the world's record for the highest number of Phantom kills at seven. This Phantom is credited with downing, three Egyptian MIL-8 helicopters on the opening hours of the war and a further four Egyptian MiG-21's during daily skirmishes over the Sinai front. Two MiG-21 kills were attained on a single mission of October 23, 1973 over Egypt by Dan Haluz and Gal. Haluz went on to served as IAF commander during the IntifadaAl Aqsa years of 2000-2004. In 1975 Phantom 609 was lost in an accident while serving with the Bat squadron. Standard colors for the F-4E throughout its service with the IAF consisted of FS33531 sand, FS30219 brown, FS34227 green over an FS35622 light blue undersurface.



Above: Nesher no.02 of the Keepers of the Arava squadron accounted for 42 of the 277 Arab aircraft downed by the IAF during the 1973 Yom-Kippur War, with no loss to their own. The airplane is seen being towed to a hardened shelter carrying a pair of Shafrir II IR guided air to air missiles. The indigenously developed Shafrir II accounted for 120 of the air to air kills scored during the war. The Nesher (Eagle in Hebrew) was built in secrete by IAI using French "spare parts" and Atar 9C engine manufactured using drawings "stolen" from a Swiss engine manufacturer. Knowledge of the Nesher was considered secrete until its sale to Argentina in 1982.



Above: With the appearance of Libyan Mirage V's over the Suez Canal crossing of Baloza-Romani on the ninth day of the war, IAF Mirage and Neshers were painted with FS33538 yellow and black identification triangles on the vertical fin and wing surfaces. The IAF retained use of these identification triangles until the introduction of Ghost Grey colors on the Mirage and Kfir beginning in end of 1976 (with the arrival of the F-15 Eagle).



Above: This 1973 war photo shows Knights of the North squadron A-4E no.232 fitted with a pair of Walleye II optically guided bombs and an AIM-9B sidewinder on the outboard rail. In order to deliver these guided bombs, a telemetry pod was fitted on the opposite outboard pylon.



Above: Three A-4E Skyhawks of the Flying Wing squadron lined up for a Yom-Kippur War mission. Note the white external fuel tanks that arrived from the US. The Flying Wing squadron retired their Mystére IVs' between February and March 1971 in favor of 25 US Navy surplus A-4E's. In 19 days of the Yom-Kippur War, the Flying Wing squadron conducted 823 combat missions, lossing 5 A-4E's and another 15 Skyhawks suffered extensive damage requiring depot level repair that put them out of action till the end of the war.

Right: In this rare 1974 photo, Bat squadron F-4E no.333 is seen coming in for a landing after a training mission. 1973 war delivery "Toads" retained their USAF colors of FS34102 Medium Green, FS34079 Dark green and FS30219 Brown over FS36622 Light Grey well into the 1980's; both as tribute to the US effort in aiding Israel as well as for tactical operations over northern Israel where the topographical features match those of the SEA scheme.





Above: Hammer squadron F-4E no.187 was unique in having fixed wing leading edge slats fitted prior to the October 10, 1973 war. To make the aircraft more conspicuous for high-speed photography during aerodynamic trials, a large red mouth with white teeth and black outline was painted on the nose and eyes. The Yom-Kippur War caught the IAF by surprise and F-4E no.187 flew into combat with the gaudy teeth applied. On the second day of the war, its wing was severely damaged by a SAM yet the aircraft brought its crew safely back to base. In this photo, F-4E no.187 is seen at IAI hanger undergoing depot level repair. After repair, the aircraft flew with the Bat squadron until its retirement to the IAF museum where it is currently on exhibit in its ordinary Bat squadron markings. Note that F-4E no.187 never attained air to air kills to its credit.



Above Left: IAF budget limitations always placed emphasis on combat aircraft, with transports funded on as need arises basis. So was in the case of the 1973 war service entry of the IAI model 101 Arava. Two prototype airplanes and one awaiting delivery to Mexico were pressed into service when the 1973 war broke out. They were painted in the 1970's standard scheme of FS33531 sand, FS34227 green and FS30219 brown over FS35622 light blue. Their tall landing gear and excellent short take off and landing capability were used to transport wounded soldiers from the front lines in the Sinai to Ben-Gurion airport close to Tel- Ha'Shomer hospital.



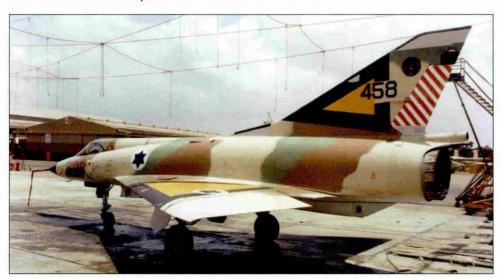
Above Right: SAAR no.096 - During the Yom-Kippur War, Scorpion squadron Saars' were used in the ground attack roll alongside the A-4 Skyhawk. Saar and Skyhawk airplanes, having a common engine, that were hit by shoulder fired SAM-7 Strellas were rotated through the same hanger facilities for repair. It was observed that the Saar's tail pipe, which extended aft of the tail control surfaces limited the SAM damage to the tail pipe. On Skyhawk aircraft where the tail pipe ended at the same line as the tail control surfaces, the SAM damage included crippling hits on the horizontal stabilizer and rudder. During the war, the Saar's wings and vertical fin were painted with FS33538 yellow and black identification rectangles that were retained till the Saar was removed from service in March 1975.



Above Left: Mirage no.159 was the IAF's leading MiG killer prior to the October 6, 1973 war. At the opening hour of the 1973 war, First Fighter squadron pilot Ethan Karmi downed a Kelt air to surface missile fired on Tel-Aviv by an Egyptian TU-16 raising Mirage 159's kill tally to 13. On the second day of the war, Mirage 159 blew a tire during take off, skidded on the runway and caught fire. The plane and pilot were dowsed with foam that saved them both, and the plane was sent to IAI for repair. A year later Mirage 159 was photographed at IAI in an airworthy condition. Mirage 159 was sold to Argentina in 1982 and was returned to Israel in October 2003 to take its place of honor in the IAF museum.



Above Right: Israel's leading ace Giora Epstein is seen posing with his daughter next to IAI Nesher 561. In addition to Epstein's leading IAF ace status, he also holds the world's record for highest number of supersonic Jet kills at 17. Nine of the kills were scored within a time period of 48 hours between 18 October and 20 October 1973 and another three on a single mission of 24 October 1973. Eight of Epstein's kills were scored on Hornet squadron Nesher no.61 which after the war was given the numeral 5 aircraft type prefix and transferred to the First Fighter squadron.



Left: With Mirage no.159 out of commission on the second day of the 1973 war, eight kill Mirage no.158 began amassing kills, becoming the IAF's second 13 kill Mirage. Note the "black box" ahead of the nose gear, used to house ECM electronics when the airplane was fitted with a recon nose. For the recon role, the tail number prefix 4XX replaced the fighter 1XX prefix.



Above: During the second half of 1972, the Hornet squadron replaced their 1950's vintage Ouragans with IAI built Mirage 5 "Neshers" (Eagle). On the 9th day of the Yom-Kippur War, Libyan Mirage 5 jets bombed IDF troops crossing over to the Egyptian side of the Suez Canal. To aid ground troops as well as aid visual acuity in air to air combat, IAF Mirage, Nesher and SAAR – MiG-17 look alike – airplanes were painted with large FS33538 Insignia Yellow triangles outlined with wide black borders. These identification triangles were retained after the war and were applied on IAI Kfirs until a Ghost Grey scheme was adopted for these delta-winged fighters. Soon after the 1973 war, the Hornet squadron adopted diagonal yellow & black checkered pattern as an added rudder recognition feature that became common practice amongst IAF fighter squadrons during the 1980's. With the entry of the Kfir into IAF service in 1976, Hornet squadron "Neshers" were sold to Argentina and became known as the Dagger during the 1982 Falklands conflict.

1973-1982 & the Lebanon War

The static line of defense doctrine adopted by the IDF prior to the 1973 war proved flawed and a new fluid battlefield doctrine was introduced. As a result of post 1973 war studies, new Cobra and Defender attack helicopters capable of pinpoint delivery of TOW anti tank missiles were introduced. To locate the new threat imposed by mobile SAM, AAA and low flying helicopters and fighter planes, day and night time intelligence platforms were introduced in the form of the Mohawk, Hawkeye and IAI scout RPV. New Kfir C2, F-15 Eagle and F-16 Fighting Falcon jet fighters replaced less capable F-4E, Mirage IIIc and Nesher interceptors. New precision optically guided and radar homing missiles such as the Maverick, TOW, Shrike and Standard were introduced into the IAF combat doctrine by the early 1980's. The IAF's post Yom-Kippur War concept of operations also brought forth new camouflage colors as well as a new three digit aircraft identification system, with the first digit standing for a major aircraft sub-type. For example, A-4E's given 800 numbers and the over 100 A-4N's delivered given 300 & 400 series numbers. Aircraft assigned high altitude air surveillance and air superiority missions such as the E-2C, RF-4E, and Kfir C2 received a Compass Ghost Grey scheme introduced to the IAF with the arrival of the F-15 Eagle in December of 1976. 1970's vintage fixed wing aircraft retained their original delivery schemes. Close support nap of the earth flying helicopters replaced their 1970's desert colors with overall FS20095 brown

Above: Boeing 707 no.007/4X-JYI - In order to reach Israel on their flight back, the four C-130 transports had to refuel in Nairobi airport situated in Kenya. Awaiting the hostages at the airport was an IAF Boeing 707 transport fitted to serve as a make shift hospital and another in the air serving as a communications relay with Israel.

(widely referred to as FS30099). The new F-16's replaced the 1970's standard FS34227 green with a world war II RAF vintage color of (BS381c/210 Sky) FS34424 green, with FS36375 Light Ghost Grey replacing FS35622 light blue for the undersurface color.

The PLO's attempt to destabilize the Hashimite kingdom of Jordan headed by the King Hussein led to their expulsion to Lebanon in September 1970, Backed by Syria, the PLO forced the Lebanese Christians out of Southern Lebanon and key port cities as Tzor and Beirut. As peace talks with Egypt progressed between 1979 and 1982, PLO terrorism rose in ferocity that required IDF entry into Lebanon between 15-21 March 1978 "Operation Litani" and again on June 6, 1982 "Operation Peace for Galilee". Syrian efforts to intervene in the fighting gave the IA the opportunity to implement the lessons learned since the 1973 War. In five days of intensive fighting between June 6 and June 11, IAF F-15 and F-

16 fighters downed 81 MiG-21's & MiG-23's and 5 Gazzel helicopters. With IAF Kfir C-2's, A-4's, F-4's, Ze'ev (Wolf) ground based radar homing missiles destroying 19 Syrian SAM batteries consisting predominantly of SAM-6 mobile missiles between 2pm and 7pm of June 9th, 1982.

With air superiority achieved in the first five days of combat operations, the IDF besieged PLO fighters in Beirut until August 21,1982 when they were expelled to various Arab countries including Tunis. Syrian Gazelle helicopters flying attack missions against IDF ground troops were a source of confusion for both the ground troops and IAF pilots. In order to help them distinguish friend from foe, yellow up right "V" was applied to the side of the fuselage of all IAF helicopters. In the mid-1980's the FS20095 dark brown was replaced with a lighter shade of FS30145 although the paint can was labeled FS30219 by Tambur Paints.



Above: On June 27, 1976 Air France flight 139 from Tel-Aviv to Paris was highjacked during a stopover at Athens airport in Greece by a German man & woman and two Palestinians belonging to the PFLP terrorist organization. The A300 Airbus was diverted to Libya for refueling and from there flown to Entebbe airport in Uganda. On the night of June 30th, the Jewish passengers were separated from the non Jews that were set free. The French aircrew elected to stay with their Jewish passengers knowingly putting their lives at risk. The Israeli government headed by Itzhak Rabin was given an ultimatum, free all PLO prisoners within 72 hours or the hostages will be killed. On July 3rd Operation "Thunder Ball" was set into motion; four Hercules transports C-130E no.102, C-130E no.106, C-130H no.420 and C-130H no.435 (marked 4X-FBA/B/Q/T respectively) took off at 3:30 p.m. for a nine and a half hour flight to Entebbe. Within 30 seconds after entering the old Entebbe passenger terminal, where the hostages were kept, all 12 PLO terrorists were killed. 45 minutes later the last of the four C-130's took off on their return flight, with the mission commander Jonathan Netanyahu laying dead next to his soldiers. At 9:43am July 4, 1976, C-130H no.420 4X-FBQ is seen here after landing at Ben-Gurion airport with the 96 survivors of the ordeal set free.



Above: The First Fighter squadron inherited the photo-recon roll from the Bat squadron when they transitioned to the F-4 Phantom prior to the Yom-Kippur War. Mirage no.498 is seen fitted with a long range side looking "Tzniot" recon camera and Mirage no.459 in the background is fitted with a "Moshel" look down recon camera. After the First Fighter squadron transitioned to the Kfir C2 in 1976 these nose sections were fitted to Kfir C2 numbers 419 and 451.





Above Left & Right: The Negev squadron was born on August 1st, 1976 with the transfer of Hornet squadron Nesher aircraft to the IAF Sinai air base of Eitam. The Negev squadron operated both single seat and two seat Nesher aircraft until they were sold to Argentina in 1978. The Nesher were replaced by Mirage Illc's of the First Jet squadron who were transitioning to the F-16.

Right: The Negev squadron operated both post-67 war desert camouflage colors, and Compass Ghost Grey camouflage Mirage IIIc airframes at the same time. In this view we see that Mirage no.171 fitted with the Atar 9c engine that was characterized by a shorter aft fuselage and angled up parachute housing. Mirage no.171 is seen photographed at Israel Aircraft Industries prior to its sale to Argentina.





Left: Compass Ghost Grey camouflaged Mirage 153 is seen taking off in a rapid reaction alert intercept configuration with a 880 liter center line supersonic fuel tank, a pair of 500 liter supersonic wing tanks and a pair of Shafrir II IR homing air to air missiles. The Negev squadron operated the Mirage at the end of 1978 until they were replaced by F-16A/B Netz in September 1981.



Above: Kfir no.709 - The first Israel Aircraft Industries Kfirs were transferred to the First Fighter squadron on April 14, 1975. Installation of the Phantom II's General Electric J79 engine offered the Mirage/Nesher airframe 30% greater thrust with 17% reduction in fuel consumption. This translated to greater weapons load capability and range than was possible in the aging Mirage and Neshers airplanes that were in IAF inventory.



Left: The Valley squadron became the third squadron to operate the Kfir, after the First Fighter and Hornet squadrons. The squadron's first 11 Kfirs were transferred to the Valley squadron from the First Fighter squadron in July 1977. As Valley squadron Skyhawk pilots transitioned to the Kfir (using two seat Neshers), the squadron continued A-4 operations until the final A-4H Skyhawk was transferred to the Knights of the North squadron on July 20, 1977. Four months later the Valley squadron led the first Kfir bombing mission into Lebanon, striking all of its intended targets, and becoming the first squadron to bomb with the Kfir. During the June 1982 Lebanon War, the Valley squadron operated Ghost Grey camouflaged Kfirs in the air to ground roll with no air to air kills to its credit. On 29 July 1985 the Valley squadron was closed down due to budget cuts which forced reduction in Kfir operations.



Above: This photo is of historical significance as it was taken from on board the late Egyptian president Anuar Saadat's 707 presidential plane on route to Israel, for his 1978 visit to Jerusalem. This visit opened the way for a peace settlement between the two nations. Kfir no.705 of the Hornet squadron has its squadron insignia painted out for this escort mission. The aircraft is fitted with three 1300 liter external fuel tanks and a pair of AIM-9D Sidewinder missiles. This Kfir was to see service with the USMC VMFA-401 aggressor squadron, marked with nose number 05.







Top: A-4F no.611 and 615 - On August 6, 1978 the former Fouga Magister squadron of Six-Day War fame was reformed to operate A-4F (600 id numbers) and A-4H (200 id numbers) versions of the Skyhawk. The reformed squadron adopted a "Battering Ram" for its squadron insignia with yellow rudders. During the Lebanon War, A-4's of this squadron were used in the Wild Weasel roll, hitting Syrian radar guided AAA and SAM's using AGM-45 Shrike radar homing missiles and Mk.20 Rockeye cluster bombs. In this Early 1980's photo we see a pair of A-4F's taking fuel from a newly delivered ex-USAF camouflaged KC-130H.

Middle: The Dragon squadron flew missions into Lebanon with the red rudder and white stripes shown in this early 1980's photo. In 1984 it joined the Flying Wing squadron at the post-Egyptian peace treaty Negev air base of Nevatim and reversed the rudder colors to a white rudder with red stripes. The aircraft is carrying capped Zuni rocket pods. Once the rockets are fired, the empty pods limit the aircraft's maneuverability – railing the aircraft into a straight path. For this reason, the use of Zuni pods is quite limited, with the IAF preferring the aircraft to remain clean for egress from the hostile combat zone.

Bottom: Flying Tigers squadron ship kill A-4H no.272 is seen photographed during a July 21, 1977 display at Hatzirim Air Base. The aircraft is seen after being upgraded to A-4N standards with the addition of an avionics hump housing a nav-attack computer in addition to a pair of 30mm guns and post-73 war extended exhaust pipe. Common to post-73 war combat aircraft was the addition of rudder squadron recognition colors. The Flying Tigers used FS35090 blue and white rudder colors which were the same used for the roundels.

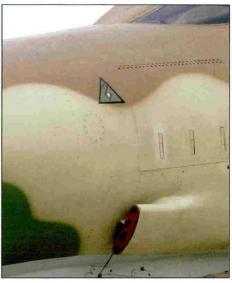


Above: On March 31, 1975 the Scorpion squadron became the fifth IAF squadron to operate the Phantom. Between 2pm and 9pm of June 9, 1982 twenty Peace Echo V Phantoms of the Scorpion squadron decimated 19 Syrian SAM sights spread along Lebanon's Bakka Valley. They made use of AGM-78 Standard ARM (anti-radiation missiles), and IMI developed "Samson" and "Dilila" RPV's and gliders to saturate and confuse Syrian radar.



Above: RF-4E no.490 is one of six Peace Echo V Ghost Grey RF-4E's supplied to the IAF between 1976 and 1977. RF-4E no.490 is the only recognizance Phantom of the lot to retain its original external camera-opening configuration. Note the short ALQ-119 ECM pod on the right hand pilot and the missile rails on the left wing pylon used for carrying AIM-9L versions of the Sidewinder missile.





Above Left & Right: Between 1974 and 1976, three in service F-4E Phantoms were modified by General Dynamics to carry the oblique photography recognizance camera known as HIAC. For this modification the nose section was extended by 12 inches and its Vulcan canon and radar were removed. F-4E serial numbers 69-7567, 69-7570 and 69-7576, designated as F-4E(S) after the modification, were returned to the IAF in 1976 and were given tail number 492, 498 and 499 by the Bat squadron. In 1980 during a mission over Iraq, a pair of HIAC equipped F-4E(S) were challenged by Iraqi MiG-21bis aircraft. While chasing F-4E(S) no.498 one of the MiG's ran out of fuel and the pilot jettisoned, leaving his aircraft to crash into the ground. For this "economical" kill, F-4E(S) was credited with a triangular Iraqi kill marking.

Right: F-15A no. 620 - A year prior to the 1973 war Soviet pilots based in Egypt made routine high altitude recognizance flights over Israel in the MiG-25 Foxbat. Repeated efforts to down the Foxbat using Mirage and Phantom aircraft proved futile, they just flew too high and too fast to be caught over Israeli air space. When the US approved the sale of the F-15 to Israel, the IAF requested immediate delivery of four pre production airframes. The first four F-15's arrived in Israel on Friday, December 10, 1976 painted in new Compass Ghost Grey mission colors of FS36375 Light Ghost Grey with FS36320 Dark Ghost Grey patch pattern applied to the upper surface which was identical to that applied to USAF Eagles at the time. With the arrival of the F-15 Eagle, all Foxbat spy missions came to an end.

Lower Right: Amongst the first five IAF pilots to be sent to Langly AFB in July of 1976 to train on the F-15 was eight kill Phantom ace named Moshe. While on a visit to the McDonnell Douglas plant, he bet his hosts that he will be the first to down with an Eagle. On June 27, 1979 he got his chance over the skies of Lebanon while piloting F-15A no.663. In a 45 second shoot out involving two formations of Syrian MiG-21's four Eagles and a pair of Kfir C-2's four of the MiG-21's were downed - the first by Moshe. In this photo Moshe is coming in for a landing after the first kill. Note the direct attachment of the Python III missile rail to the wing pylon which was later changed using a curved pylon extension that enabled the carriage of a pair of Python III's and the 600 gallon fuel tank on the same pylon.







Above: The time period this photo was taken was determined by the kill markings applied to these three F-15A "Baz" (Falcon) of the First Eagle squadron. The aircraft farthest from view, tail number 696 attained a Syrian MiG-21 kill on August 24, 1980 using an AIM-7 Sparrow missile. F-15A no.684 attained a two kills on June 9th, 1982, the third day of the Lebanon War. Although F-15A no.644 was one of the first four pre production F-15's to arrive in Israel, it has no kills to its credit (as of June 2005). The application of names to IAF F-15's began when Moshe (first to attain an F-15 kill in the world - see middle photo) took command of the First Eagle squadron in the second half of 1981.

Right: Grumman Mohawk model OV-1D no.056 / 4X-JRB was one of two "Atalef" (Bats) to be operated by the IAF between the years 1974 and 1982. Mohawk 022/4X-JRA and 056/4X-JRB entered service with the IAF in August 1974 in an overall US Army finish of FS34084 Olive Drab. In July 1977, Mohawk no.022 was displayed to the general public wearing an FS20095 dark brown over FS30280 haze grey finish and in July 1982 Mohawk no.056 was displayed in a FS30140 over FS35622 color scheme. The Grumman Mohawks were removed from active service in March 1982 after the "Zahavan" RPV's entered service. The two Mohawks were returned to Grumman in 1984 where they were refurbished and returned to US Army service.

Lower Right: Fuselage rib cracks at the critical wing-intake-fuselage joint required extensive disassembly of the Fouga airframe to replace. IAI and the IAF used that opportunity to upgrade and improve the 5,000-hour-old airframes. The existing Marboro engines were replaced with great thrust engines, an air conditioning system essential for the high heat of the Mid-East tarmac was added and over 300 other changes were made that warranted giving the airplane the new name of "Tzukit". The first Tzukit was given the number 501 and had the name "Tzukit" applied to the nose section. It was handed over to the IAF in 1981 in a new paint scheme consisting of gloss white with FS12197 red-orange trim.



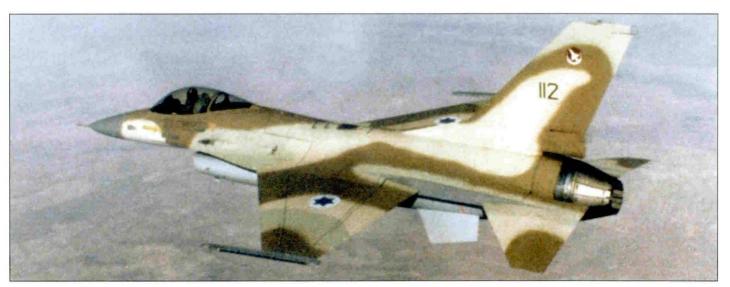




Left: AH-1G no.130 - In the aftermath of the October 1973 war the IAF had to reevaluate its reliance on a static line of defense. In mid-1974 a unit was formed at Tel-Nof airbase who's task was to evaluate the attack helicopter concept. Six AH-1G non-TOW capable Cobras were provided to Israel for these trials. These Vietnam War vintage Cobras had the early XM-35 20mm Vulcan canon mounted on the left stub wing and external fairing above the skids. They retained their original overall US Army FS34084 Olive Drab (known at the time as dark FS34087, FS24087 and FS34086) and given 100 series identification numbers.

Right: AH-1Q no.324 - The six AH-1G Cobras (s/n 19291 through 19296) were returned to Bell helicopters and modified to AH-1Q standards with the addition of the TOW missile system. These helicopters were first revealed to the general public in July 1979 painted in a new overall FS20095 dark brown color scheme (better match than FS30099 brown quoted till now).





Top: Ten months after the July 2, 1980 delivery of the IAF's first four F-16A Fighting Falcons, First Jet squadron F-16A no.112 (s/n 78-0314) became the first F-16 in the world to be credited with an air to air kill. On April 28, 1981 Israel's youngest F-16 pilot, 23 years old Lieutenant Rafi downed a Syrian Mil-8 helicopter over Riaq, Lebanon with a two and a half second burst of 20 mm gun fire from the aircraft's internal Vulcan canon. The F-16 introduced a new color scheme to the IAF, which was later applied to the Kfir C7 and F-15I. The new scheme colors consisted of the familiar FS33531 sand and FS30219 brown but with a new shade of FS34424 green, identical to that used by the RAF during WWII known as BS381c/210 Sky. For the undersurface, FS36375 Light Ghost Grey replaced the FS35622 light blue used on the 1970's vintage desert camouflage.



Above: Sunday June 7, 1981 4:01pm, four F-16A's of the First Jet squadron (shown in the photo) along with four F-16A's of the Knights of the North squadron took off on a 2,000 km flight from Etzion air base in the Sinai to Iraq. Their intended target was the Osirak nuclear power plant on the outskirts of Baghdad. For this mission, each F-16A was fitted with three fuel tanks, a pair of Mk.84 two thousand pound bombs and a pair of wing tip mounted AIM-9L missiles. Of the four First Jet squadron aircraft shown, F-16A number 107 has a Syrian roundel kill marking applied dating back to the April 28, 1981 shot down of a Syrian MIL-8 helicopter (the second MiL-8 downed on that day).



Left: Knights of the North squadron commander Amir Nahumi holds the distinction of being the first F-16 pilot in the world to down a MiG in air combat (the IAF's April 28, 1981 two kills were Mil-8 helicopters). On July 14, 1981 Nahumi flying F-16A no.219 downed a nap of the earth flying Syrian MiG-21MF over the skies of Lebanon using an AIM-9L Sidewinder missile. After that kill, Nahomi went on to become the IAF's leading F-16 ace with 7 kills which were added to the 7 kills he attained as a Phantom pilot during the Yom-Kippur War.



Right: IAI Scout was first revealed to the general public in the summer of 1983 at a Tel-Aviv arms exhibit. The Scout was a direct outcome of the lessons learned from the 1973 war. F-4 Phantoms sent to suppress Egyptian and Syrian SAM's fell pray to mobile SAM-6 and ZSU-23 mobile that were moved often to deceive recon aircraft over flying their positions. The IAF made first use of the Scout in the 1979 Litani operation, making use of the real time video images relayed down from the aircraft to locate elusive PLO terrorist targets in Southern Lebanon. The Scout's were painted FS33531 sand with FS30219 spots applied to its fuselage and upper wing surfaces, with FS35622 light blue under surfaces.



Right: The IDF's initial aim during the operation Peace for Galilee was to route the PLO out of southern Lebanon past the 40-kilometer natural boundary of the Litani River. As the war unfolded, the IDF revised its intentions and entered the capital of Beirut on June 26, 1982 reaching Beirut International Airport on August 1, 1982. The IDF placed a siege on the Lebanese capital between June 26 and August 21 that culminated in the exile of the PLO to various parts of the Arab world with Araft being exiled to Tunis. With the IAF responsible for Israel's air defense, all ground based anti aircraft assets are also assigned to it including the M113 "Zelda" mounted Vulcan anti aircraft gun. During the Lebanon War the Vulcan had the duel roll of protecting ground forces from marauding Syrian Gazelles and PLO terrorists laying in ambush along the roadside. Like other IDF armor used during the war, the M113 was (and still is) painted Earth Grey RAL7006 (a mix of 6 pts.- FS30277, 3 pts.-FS30118 and 1 pt.- FS36118).

Left: Four Grumman E-2C Hawkeyes, named "Daya" by the IAF, entered service with the IAF during 1981 and were assigned identification numbers 941, 942, 944 and 946. The Hawkeye's ability to detect low flying aircraft through ground clutter and over water played a key roll in the IAF's ability to down 86 Syrian fighters in the first three days of the Lebanon War. These aircraft entered service in a Compass Ghost Grey color scheme of overall FS36375 Light Ghost Grey with FS36320 Dark Ghost Grey disruptive upper pattern camouflage.



Left: Teledyne Ryan model 147T (AQM-34F) "Firebee" was first introduced into IAF inventory in July 1971. The long range, 60,000-ft. ceiling and 420 knot airspeed of the Firebee made it the ideal platform for high altitude recognizance over SAM threat areas. After several air engagements between Israel and Syria over Lebanon, Syria moved their SAM umbrella from along the border to inside Lebanon. Throughout the month of May 1981 IAF launched a large number of Firebee drone missions to monitor Syrian activities within Lebanon. The high-flying drones were easily detected by Syrian early warning radar and were often intercepted by Syrian MiG-21's. The poor turning rate of the Firebee made it easy pray for the MiG pilots but the lack of a pilot in the Firebee enabled new tactics to be developed using extremely high instantaneous turn rates such as steep climbs and steep dive to shake off the MiG pilots. On a mission that took place on May 14, 1981 a Syrian pilot in chase of an overall FS16440 Light Gull Grey Firebee, had to eject from his MiG-21 after entering a deep stall and losing control of his aircraft. Several days after the event, the IAF's first remotely piloted vehicle squadron was credited with the world's first kill for an unpiloted aircraft.





Above: In November 1979, the IAF became the sole operator of the TOW equipped MD500 Defender helicopter. It's small size; high agility and virtually silent five-blade rotor made it the more effective over the battle field then the Cobra. On the third day of the Lebanon War, June 8, 1982 a pair of Defenders knocked out Syrian P-15 search radar installations based at Damour that provided the PLO and Syria early warning of approaching Israeli aircraft. The following afternoon 14 out of 19 Syrian SAM-2/3/6 missile sights based in the Bekka Valley were destroyed; and 82 Syrian aircraft attempting to intercept them were downed. During the Lebanon War, IAF Defenders were painted in a FS20095 (better match than FS30099 queted till now) overall brown scheme. To aid ground troops in differentiating between IAF Defenders and Syrian Gazelle helicopters operating over the battle field, the IAF added an FS23594 yellow V to the fuselage of all of its helicopters. Forward-deployed Defenders that could not be brought to their home base were brush painted in the field with readily available FS33538 Insignia Yellow. Although highly vulernable to ground fire, no "La'atot" (Acrobat) was lost in combat during its fourteen years of operations with the IAF.



Left: AH-1S no.332 - In the later half of 1979 the first of 36 new built AH-1S Cobras arrived in Israel. At the outbreak of the June 6, 1982 war, the IAF operated a mixed fleet of MD500 Defenders and AH-1 Cobras in the same squadron. Like the Defenders, the Cobras were painted FS20095 Dark Brown. Between June 4th and August 12th of 1982, IAF Cobras and Defenders destroyed 50 PLO and Syrian tanks and artillery pieces in the Lebanon battle field.

Right: The first pair of twin engine Bell model 212 (UH-1N) helicopters arrived in Israel in June 1975, replacing the under-powered single engine Bell UH-1D operated by the IAF since 1969. During the first 30 days of combat in Lebanon, the Turning Sword and Southern Bell 212 "Anafa" squadrons airlifted 2,637 wounded soldiers out of Lebanon to hospitals in Israel. In the initial stages of the June 6, 1982 Lebanon War, Bell 212's operated in their 1970's vintage camouflage colors. As the war progressed, they were repainted FS30095 overall brown with FS23594 pale yellow identification V applied to the tail boom (shown in this photo). In the Mid-1980's the FS30095 brown was removed and a lighter brown FS30145 and yellow FS33434 - "V" were applied.







Left: Super Ferlon no.018 and no.010 had the distinction of serving as VIP transports for the former Egyptian president Anwar Sadat and Israeli Prime Minister Menachem Begin to the meetings they held between the years 1977 and 1982, which culminated in a Peace agreement between Egypt and Israel. Of interest is the application of 1982 war upright identification "V" on the 1970's vintage standard scheme colors. Also note the engine exhaust openings indicating that this airplane was re-engined with a pair of General Electric T58 engines used on the CH-53D.

Left: Two Syrian Gazelles were found virtually intact after suffering minor battle damage that forced their abandonment in Lebanese territory. The two Gazelles were transported to Tel-Nof air base, where the 22 heavy maintenance unit joined parts from the two to make Gazelle no.1333 (s/n 1787) airworthy. Seventeen days after their arrival, Gazelle no.1333 made a flying appearance in the July 20, 1982 Israeli Air Force Day air display. The second Gazelle, no.1222 (s/n 659) was eventually restored as well and is currently on display at the IAF museum. Gazelle no.1333 shown here is painted using paints of local mix. The light tan color is a mixture of FS33531 sand and FS30219 tan at a ratio of 1:1. The green is FS34424 green to which 12% FS35090 blue is added. The undersurface color is FS36375 Light Ghost Grey with



Above: AH-1S no.397 - The first of an initial batch of twenty AH-1S versions of the Cobra, named "Tzefa" (Viper/Adder) in Hebrew, entered service with the IAF in 1979. During the Lebanon War, Cobras and Defenders operated in the same squadron that had the yellow, winged snake insignia shown here. After 1982, the IAF received its full compliment of attack helicopters, enabling the formation of a new all MD500 Defender squadron to be formed, the "Magic Touch" squadron. Beginning in 1985, AH-1S Cobras were fitted with a new exhaust infra red suppressor outlet and a new FS30145 brown scheme which replaced the FS20095 dark brown used during the Lebanon War. The identification "V" color was standardized, using FS33434 yellow, and a 23 cm diameter roundel was introduced using FS35109 blue with an FS36463 grey background circle (at times FS36375 or FS36320 was used).



Left: Maneuverability short falls of initial production Kfirs were remedied with the addition of radom winglets, intake mounted fixed canards, and a "dog tooth" wing leading edge. The improved Kfirs were designated with the new model number C2 and entered First Fighter squadron service in 1977. On June 27, 1979 four First Eagle squadron F-15's and a pair of First Fighter squadron Kfir C2's flew high-low CAP for Phantoms and Skyhawks attacking PLO positions in the vicinity of Tzidon, Lebanon. Eight Syrian MiG-21bis aircraft challenged the attacking aircraft and within 45 seconds, five of the MiG's were downed, one of them credited to Kfir C2 no.874. The Kfirs' shown in this photo have bogus numbers applied and 1982 Lebanon War "short" First Fighter squadron rudder stripes applied.



Above: F-16A no.107 is the highest scoring F-16 in the world with six and a half kills. This photo depicts F-16A no.107 as it appeared shortly after the June 1982 war with 5 known kills applied. The aircraft has the name "Sufa" (Storm) applied in red shaded black Hebrew lettering. The number 107 was applied on the vertical flange of the fuselage between the wing flap trailing edge and horizontal stabilizer leading edge. Only in 1999 were the F-16's 1982 war kills confirmed, and the IAF historical branch credited F-16A no.107 with the 61/2 kills. Prior to and during the 1982 Lebanon War this aircraft downed the following Syrian aircraft: 4 ½ MiGs' (only one definitely known to be a MiG-23), a Gazelle and an SU-22.



Left: The Hammer squadron was formed as the IAF's first strategic bomber squadron on July 16, 1948 operating three Boeing B-17 bombers until April 1, 1957. Twelve years later, the squadron was reformed on November 1, 1969 headed by Avihu Ben Nun, who went on to become the IAF's eleventh commander between 1987 and 1992. The Hammer squadron's first air to air kill came four days prior to their receipt of the F-4 Phantom II on 15 November 1969. Hammer squadron pilots Ehud Chenkin and Eyal Achikar flying F-4E no.608, downed the first IAF F-4 kill as guest pilots with the Ahat squadron (see page 41). The Hammer squadron added yellow and black checkers to their F-4's soon after the 1982 war in Lebanon and continued Phantom II operations till 1994 when they were chosen to operate the new Boeing strategic bomber designated F-15I Ra'am (Thunder).

1982-2005 Intifada & Intifada Al-Aqsa

ith the PLO leadership out of Lebanon, a power vacuum developed in the region, which was soon filled by various Syrian backed Palestinian fringe groups and the Islamic Republic of Iranian backed Hizbullah. With these new radical groups posing a threat to Northern Israel and to the Lebanese Christians of southern Lebanon the Israeli government to set up a 40km safety zone within southern Lebanon in 1985. Israeli Army occupation of southern Lebanon did not serve its intended purpose of providing protection from Katusha rockets routinely fired by terrorists on settlements spread along northern Israel. Two operations were waged against Hizbullah; July 25-31, 1993 "Operation Accountability" and April 11-27, 1996 "Operation Grapes of Wrath" provided only a framework for limited violence. In both operations, Israel used new night war fighting precision strike capabilities of the AH-64A Apache to strike at vehicles and multi story building offices used by Hizbullah while in an effort to minimizing collateral damage.

Palestinians living in the territories captured by Israel in the 1967 war, began the first Intifada uprising in December 1987. The Intifada ended Israeli-Palestinian coexistence, and lead to the September 13, 1993 signing of the Oslo agreement that gave the Palestinians self-rule in return for peace. The following year, on October 26, 1994 Jordan's king Hussein signed a peace treaty with Israel. On May 17, 1999 the terror weary Israelis elected Ehud Barak as their new Prime Minister. Barak pulls the

IDF's out of southern Lebanon on the night of May 24, 2000 and initiates final status peace talks with PLO chairman Yasser Arafat. Final status peace talks hosted by W.J. Clinton between July 11-25, 2000 end with Arafat's refusal to sign on a final peace agreement that recognizes the legitimate right of a Jewish state to exist alongside a Palestinian state. Instead of peace, the Palestinian Authority (PA) uses Nazi propaganda methods to incite the Palestinian population. On September 28, 2000 Likud parliament member Ariel Sharon visits the Temple Mount, inciting rioting by Palestinians living in Israel as well as within the territories. The following month, October 12, 2000 two unarmed IDF reservists make a wrong turn on their way to their base in Ramallah and are brought into custody by PA police. In the Ramallah police station the two soldiers are brutally lynched and thrown out of the window of a two-story police station. That afternoon IAF AH-1S Cobra gunships bring the building down and on the same night IAF AH-64A Apaches destroy the PA's two airworthy Mil-8 helicopters and armored personnel carriers in the Gaza Strip - Intifada Al-Aqsa has began. On May 24, 2001, Hizbullah introduced a new method of terror, aerial terror in the form of a Lebanese registered Cessna 172 that make its way from Lebanon into Israeli air space. Fearing that the airplane may be packed with explosives, it is brought down by an Apache helicopter before reaching the city of Netanya. Four months later, September 11, 2001 Al-Qaeda terrorists hijack four passenger airliners out of Boston, crashing two into the twin towers of the World Trade Center in New York City, a third into the Pentagon building in Washington DC, and the fourth is diverted from its intended target and is forced by its passengers to crash into an open field in Pennsylvania.

On March 27, 2002 eve of Passover, a Hamas suicide bomber enters the Park Hotel located in Netanya and detonates his bombs. murdering 29 civilians and injuring another 130. The following night, the IDF launches operation "Chomat-Magen" Shield) which sees IDF forces enter PA controlled territory for the first time since the 1993 Peace Agreement with Arafat. IAF night vision equipment is put to use on a wide scale, enabling the IDF to apprehend Palestinian suspects in their homes. Night vision capable Apache and Cobra helicopters work in conjunction with IAI Searcher II remotely piloted vehicles and overall FS36300 light grey Beechcraft B200 Tzofit aircraft fitted with Elbit thermal imaging equipment to locate and strike armed terrorists without injuring the human shields surrounding them. Between September 29, 2000 and March 31, 2002 Palestinian terror strikes against Israeli civilians costing the lives of 400 killed and 3,571 injured.

As of this writing, the Jewish homeland of Israel has not yet achieved peace with the Muslem world. For as long as bigotry and hate is fostered by the Arabs against Israel, the IAF will remain the IDF principle weapon in the war of the few against the many.



Above: F-16A no.126 "Magen" (Shield) of the First Jet Squadron is landing in an unusuall configuration of six Sidewiders. In the Mid-'80's F-16A's of the First Jet and Knights of the North Squadrons were fitted with large horizontal stabilizers and external chaff/flare dispensers on the vertical fin root and between the aft fuselage ventral fins.



Above: F-15A no.673 has a single air to air kill to its credit, dating back to July 29, 1981 when captain Shaul downed a Syrian MiG-25. F-15A no. 673 had the name "Ha-Oketz" (Stinger) applied in blue to the left side of the radom at the second half of 1981, hence it could not be confirmed that it had the name painted on during the kill. IAF F-15's were credited with downing another one and a half MiG-25 Foxbats. The first on February 13, 1981 with airplane 672 (named Tornado later that year) and another half kill was shared between F-15C no.821 "Paras" (Bearded Vulture) and a Hawk SAM on August 31, 1982.





Above: During a May 1st, 1983 dissimilar air combat training flight, F-15D no.957 - "Markia Shakim" was involved in a mid air collision with an A-4 Skyhawk. The pilot experienced some handling difficulties and believed that his right wing tip and aileron were damaged. After landing he went to view the damaged wing tip only to find that he landed with no wing at all! After several weeks of waiting for a replacement wing to arrive from McDonnell Douglas, Eagle 957 was back in the air. On November 19, 1985 "Markia Shakim" (Sky Blazer) shared a Syrian MiG-23 MLD kill with F-15C no. 840 - "Commando" over the skies of Lebanon.



Above: In this 1986 photo F-15C no.840 "Commando" and F-15D no.957 "Markia Shakim" are flying together after sharing a Syrian MiG-23 kill on November 19, 1985. Eagle no.840 is seen painted with six kills and no.957 with five. Commando's title of the world's top scoring Eagle was stripped away by the IAF historical branch in 1999 after research revealed that it only had 3 $\frac{1}{2}$ kills, thus making F-15D no.957 "Markia Shakim" (Sky Blazer) the world's leading Eagle MiG killer with 41/2 air to air kills.

Right: The Arava squadron operated the Kfir C7 between the years 1983 and 1994. For this roll, the Kfir C7 was painted in a camoflage scheme similar to that applied to the F-16; consisting of FS34424 RAF-Sky green, FS33531 Sand, FS30219 brown and FS36375 Light Compass Ghost Grey underneath. C7 models of the Kfir were given 5XX series identification numbers, which were applied to the vertical fin and nose gear door. For a short time, all Arava squadron Kfirs were assigned nicknames with Kfir no.555 given the name "Shabtai" (Saturn). Note the chaff/flare dispensers added to the centerline pylon.





Left: A two seat version of the Kfir took to the air six years after the single seat variants were in squadron service. As the Nesher and Mirage were sold to Argentina between 1981 and 1982, the need for a two-seat Kfir conversion trainer arose. All IAF Kfir TC-2's wore a Compass Ghost Grey scheme consisting of FS36375 overall with FS36320 Dark Ghost Grey patches on the upper surface and vertical fin. Kfir TC-2 no.301 is seen in mid-1980's Parrot squadron colors with a FS35109 blue and FS31136 red vertical fin trim colors.



Above: In February 1980 the Israeli government gave IAI the go ahead to develop the Lavi (Lion Cub) multi roll fighter as a replacement for Skyhawks and Phantoms in IAF inventory. The Grumman Aerospace graphite composite wing designed for the Lavi was to give it the ability to carry the load of an F-4 Phantom while having the wing the size of the A-4. The advanced radar, ECM and weapons delivery capability came at a price too high for the nation of 5 million people to support. The Lavi project was terminated in August 30, 1987 after three airworthy prototypes were built.





Right: On the day of the Valley squadron's fortieth anniversary July 2, 1991 the first four block 30 F-16D's arrive at the squadron. The squadron first combat operations take place during the July 25-31, 1993 operation "Deen Ve Cheshbon" against Iranian backed Hizbullah terrorists operating out of southern Lebanon.

Left: The first three of 51 block 30 F-16C's arrived in Israel on February 9, 1987 and were assigned to the First Jet squadron. They were all single seat versions that had their vertical fin identification numbers applied at General Dynamics. Block 30 F-16C's differed externally from their block 10 and 15 F-16A single seat predecessors in having a large horizontal stabilizer, GE F-110 engine, beefed up landing gear, bulged main gear doors, larger nose mounted RWR, ECM bulges under the intake position lights, an extended vertical fin root, and like the F-16A & B retained the small intake.

Lower Left: The first block 30 two seat F-16D Barak arrived in Israel on December 21, 1987 and had the number 031 applied to the vertical fin. Initially, all block 30 F-16D's served with the First Fighter squadron, enabling them to retire their Kfir C2's. IAF two seat block 30 F-16D's were the first F-16's in the world to be fitted with a wide intake and external fuselage avionics hump in addition to other features introduced to the block 30 F-16C (block 30 F-16C's do not have a wide intake). With the arrival of block 40 F-16C/D versions of the Barak in September of 1991, all of the First Fighter Squadron's block 30 F-16D's were transfered to the Valley squadron.





Above: Knights of the North squadron received their first block 30 F-16C's on July 30, 1987. The Knights of the North squadron were also the first F-16 squadron to adopt a squadron recognition motif over the entire vertical fin, a practice started in the mid-1980's when they operated the F-16A. The pilot in this photo is wearing a helmet designed by Elbit which enable him to acquire and launch the Python IV all aspect infrared guided air to air missile.



Above: At 11:30am October 11, 1989 Major Adel Bassem of the Syrian Air Force made a seven minute afterburner dash across the Golan Hights and requested political asylum in Israel. At the date of defection, the MiG-23 MLD was equipped with the Soviet Union's most advanced "High Lark" look down shoot down radar and a chin mounted infrared seeker whose capabilities were not familiar to the IAF. The MiG-23 MLD camouflage scheme consisted of top surface colors: Yellow-Sand BS381C/388 Beige (~FS13523), Dark Earth BS381C/450 (~FS20095) and Green FS34098. The wing and fuselage undersurface was painted FS35622 with the fuselage aft section behind the aft main gear door painted Medium Blue FS35526. The radom was painted FS26152 grey and the cockpit in turquoise blue as also found on the MiG-21bis.



Left: In the summer of 1993, the IAF revealed the addition of an externalrefueling probe mounted on Grumman E-2C Hawkeye no.941. Of the four E-2C's in service with the IAF, only airplanes 941 & 944 were fitted with air to air refueling capability. These two airplanes were painted in an overall RAL7023 Betongrau (~FS36280) Haze Grey finish where as airplanes 942 & 946 not fitted with refueling probes retained their original Compass Ghost Grey color scheme. Identification roundels were applied to the top left, bottom right and both sides of the aft fuselage and are unique in having the tips of the Star of David tangent with the outer white background circle.



Above: Hammer squadron F-4E no.134 is seen in a non standard camouflage pattern carrying a "Popeye" air to ground optically guided missile. Lessons learned during the 1982 Lebanon War using optically guided glide bombs such as the Walleye and the AGM-65 Maverick missile led Israel's armament development agency Rafael and the IAF to develop a more powerful long stand off range optically guided missile that did not exist on the world market. This air to ground missile was given the nickname "Popeye" after the one eyed sailor comic book character. The successful development of the Popeye lead to its acquisition by the USAF. The USAF gave the Popeye the designation of AGM-142 Have Nap and launched it from the B-52 bomber in combat over Iraq.



Above: Fifty second hand block 10 and block 15 F-16A/B Netz aircraft entered IAF service between August 1994 and January 1995. These aircraft arrived in Israel painted in their original FS36118, FS36270 and FS36375 colors with some still wearing the markings of the AFRes 89 squadron and (DO) and ANG 107squadron (MI). These aircraft replaced Kfir C7's of the Phoenix squadron and added additional two seat trainers to the Negev and Golden Eagle squadrons. The Phoenix squadron saw first combat activity with these grey F-16's during the April 11-27, 1996 operation "Envai Zaam" (Grapes of Wrath) against Hizbullah bases in southern Lebanon. With the introduction of similarly camouflaged F-16A/B's to the Royal Jordanian Air Force in Mid-1999 they were repainted in IAF colors.

Right: The IAF's received its first ten UH-60A Blackhawks in August 1994. These 1970 vintage helicopters were US Army high time Blackhawks that saw action in Granada and during the Januray 1991 Gulf War. The IAF renamed the Blackhawk "Yanshuf" (Owl) and applied an Owl silhouette on their vertical fin. The Turning Sword squadron was the first to operate the Yanshuf alongside its Bell UH-1N's. The Yansuf retained its original overall FS34031 Black-Green paint fuselage and black main and tail rotors receiving an FS33434 yellow identification V on both sides of the tail boom.





Left: The first pair AH-64A Apaches were introduced to the IAF on September 12, 1990 and were given the name "Peten" meaning Viper in Hebrew. These new built Apaches were given 800 identification numbers and assigned to the Hornet squadron. The "Peten" made its operational debut in during the July 25 - July 31, 1993 "Deen Ve Heshbon" (Operation Accountability) against Iranian backed Hizbullah terrorists operating against Israel from southern Lebanon. IAF Apaches retained their original US Army FS34031 overall black green camouflage withe FS33434 yellow identification "V" until the year 2003, when a new "tiger" scheme was introduced on the Apache as well as the UH-60 Black Hawk (see page 78).





Left: Five Boeing 707-320C passenger planes were converted to the air to air refueling role by IAI between 1983 and 2002 and were given identification numbers 140, 248, 250, 260 and 290. Unlike the Boeing modified refueling tankers IAI does not use a glass bottomed window to view the refueling aircraft. A pair of rear facing infrared cameras provide a 3D view during day / night and adverse weather conditions. IAF 707 tankers are painted top surface gloss white with FS16492 "Boeing Grey" lower surface and wings. In this photo, 707 no.250 is seen refueling Golden Eagle squadron F-16's on their way to a 1998 training mission in Turkey.

Lower Left: In the May 1997 issue of IAF magazine it was made known that the IAF had the opportunity to evaluate a pair of MiG-29A Fulcrums for a period of three months. Through dissimilar air combat engagements carried out against IAF F-15 and F-16's it was learned that the MiG-29 had a better thrust to weight ratio then the F-15 and a wider kill radius then the F-16, afforded to it by radar guided missiles. The aircraft were sporting an overall FS26373 medium-grey finish with FS35352 greygreen disruptive upper surface patches. The aircraft shown, no.105, has a Negev (F-16) squadron insignia applied to its vertical fins while airplane number 115 had a Manat Test & Evaluation squadron markings applied. Since these airplanes were only on loan, they did not have Star of David roundels applied.



Above: First Jet squadron F-16 A/B Netz aircraft were transferred to the Negev squadron soon after the arrival of the block 30 F-16C in 1986. In this May 2000 photo, the highest scoring F-16 in the world is leading single MiG killer F-16A no.126 over the Negev desert. F-16A no.107 nose section is painted with an Osirak nuclear power plant bombing mission marking and 6 1/2 kills; of a total of 51 air to air kills scored by IAF F-16's between April 1981 and June 1982. Four of the kills were scored by Lieutenant Ethan of the First Jet squadron on June 11th, 1982 when he downed a pair of MiG-23's, an SU-22 and a Gazelle helicopter all in one mission over Lebanon. As of March 31, 2003 Netz no.107 is serving with the Flying Wing squadron.



Above: First Eagle squadron F-15D no.404 and F-15B no.113 are seen in an air to air combat configuration. F-15D no.404 is fitted with a pair of Python IV on the inboard and Python III air to air missiles on the outboard pylons, and four AIM-7M Sparrow radar guided missiles. F-15B no.113 serial no.73-113 fitted with four Python IV's and four AIM-7M Sparrows. F-15B no.113 is one of 25 USANG surplus Eagles that were received as grant from the US after the 1991 Gulf War beginning on October 23, 1991. These Eagles were overhauled and upgraded to F-15D Improved Eagle standard beginning in 1998. The Hebrew inscription at the base of the vertical fin reads "Improved Eagle".



Left: F-15C no. 575 "Ma'adim" (Mars) of the Second Eagle squadron is seen escorting a Royal Jordanian Airlines Lockheed L-1011 flown by the late King Hussain of Jordan on his August 3, 1994 flight over Tel-Aviv. Baz no.575 is seen in a typical quick alert configuration of a centerline 600 gallon fuel tank, four AIM-9M Sparrows and four (FS15488 blue) Rafael Armament Agency Python III infrared guided air to air missiles.



Left: The first pair of twenty-five F-15I versions of the Strike Eagle arrived at the IAF airbase of Hatzerim on January 19, 1998. The Boeing F-15I was given the name "Ra'am" (Thunder) and assigned to the Hammer squadron, returning to the squadron its strategic bomber roll it first held 50 years earlier when operating the Boeing B-17. The F-15l's first combat mission took place on the night of June 24, 1999 after Hizbullah shelled Kiriat-Shmona causing the loss of civilian lives. In reprisal four F-15I fitted with four 2,000 lbs, GBU-10 Paveway II laser guided bombs each put out of action all the road bridges leading into Southern Lebanon.



Top: Bat squadron Kurnass 2000 no.686 is seen in formation with HIAC camera nosed F-4E(S) no.492. Note the lack of wing and horizontal stabilizer low speed maneuvering leading edge slats and extended nose section of F-4E(S) no.492 in comparison to the Kurnass 2000 airframe.



Right: The Flying Wing squadron was formed just prior to the 1956 Suez War to enable reserve duty pilots to contribute to the war effort in aircraft that they were familiar with, which were no longer front line airplanes. The Flying Wing squadron continued with this roll when it retired the Mystére IV in favor of 25 A-4E Skyhawks on March 7, 1971. The Flying Wing squadron operated A-4E/F/H/N and TA-4H/J versions of the Skyhawk for a period of 32 years until it received the Negev squadron's F-16A/B Netz aircraft on March 31, 2003.

Left: The Kurnass (Sledgehammer) 2000 program was first envisioned as a Phantom II upgrade program that made use of radar, avionics and engines developed for the Lavi. One such aircraft fitted with Lavi P&W 1120 engines made a spectacular air display during the June 1987 Paris Air Show. With the cancellation of the Lavi, the "Super Phantom" project was downgraded to include system modifications and structural overhaul without the engine change. External modifications visible are ECM & RWR receivers' fwd of the nose gear and the vertical fin. The camouflage colors and scheme remained the same as original but the stencils were replaced by color coded triangles and the walkway changed from yellow to grey.





Above: The longest serving Skyhawk squadron in the IAF is the Flying Tigers squadron who celebrated their 30th anniversary on June 13, 1998. For this occasion, the squadron adopted a new tail fin motif consisting of a FS30219 brown tiger silhouette applied to a FS33531 sand background. In this June 12, 2001 photo we see A-4N numbers 310 and 324 overflying the quite waters of the Sea of Galilee. Note the white air to air refueling pod fitted to the centerline of A-4N no. 310.



Above: On December 24, 1991 the Scorpion squadron became the second squadron to operate the block 40 versions of the F-16C/D Barak (Lightning). Both the single and two seat versions of the block 40 F-16 have wide intakes, are fitted with General Electric F110 engine. In December 2004, all of the Scorpion squadron's single seat F-16C's were transferred to the First Fighter squadron who in turn transferred their two seat F-16D's to the Scorpion squadron.

Right: The First Fighter squadron replaced their block 30 F-16D's with block 40 single seat F-16C and twin seat F-16D's in August of 1991. Single seat block 40 F-16C's were assigned numbers in the 5XX range while the D's were given numbers in the 6XX range. In December 2004, all of the First Fighter squadron's F-16D's were transferred to the Scorpion squadron who in turn transferred their F-16C's to the First Fighter squadron. With this change, the First Fighter squadron became the only IAF squadron to operate wide intake single seat F-16's.





Above: Valley squadron block 30 F-16D no.061 is seen with large vertical fin (and wings) Stars of David applied for ACM training. In June of 2000 the IAF introduced to its F-16D Barak aircraft the Rafael Armament Development Agency's Lightning podv. The pod enables the pilot and navigator night time delivery of precision guided weapons through the use of FLIR, INS, laser designator, wide & narrow field of view optics all mounted on a swiveled head of the FS36118 Gunship Grey painted pod.



Above: Phoenix squadron F-16A no.702 & 714 are two of the fifty block 10 ex-US ANG & AFR F-16A/B's received between August 1994 and January 1995. This batch of F-16A's was given 700 series numbers and the F-16B's numbers in the 900 range. The F-16B's were distributed amongst the Negev and Golden Eagle and Phosquadrons while the F-16A's went to form the Phoenix squadron. With the introduction of US camouflage colored Royal Jordanian Air Force F-16A-ADFs' in mid-1999, Phoenix squadron F-16's were painted in IAF F-16 standard colors of FS33531 sand, FS30219 brown and FS34424 green upper surface with FS36375 Light Ghost Grey undersurface.



Above: F-16A no.243 (2003) - In 1986 the Nights of the North squadron received block 30 F-16C Barak(im) and handed over their Netz aircraft to the Golden Eagle squadron. In 1999 all eight F-16A's that participated in the bombing of the Osirak nuclear power plant in Iraq received a special marking on the left side of the nose. A year later the Golden Eagle squadron commemorated their fiftieth anniversary by adding large FS33531 sand eagle motif to the vertical fin of their F-16's. F-16A no.243 holds the honor of being piloted by Israel's first astronaut Ilan Ramon who was tail end Charlie on the mission to Baghdad, a mission which he planed the egress and return routes where all eight F-16's returned safely to base.



Left: F-16A no.116- On the fifth day of the 1982 Lebanon War, captain Rafi (who was the first pilot in the world to attain an air to air kill in the F-16) was flying as a wingman in F-16A no.116 named "Shavit" (Comet) for the leader of a four First Jet squadron F-16A formation was the first to spot a pair of Syrian MiG-23 fighters flying below. Rafi downed the pair unintentionally when he launced two Sidewinders on one of the MiG's after the first Sidewinder's smoke trail cut off. The first Sidewinder found its mark and the second flew into the second MiG-23 which was the closest target it could find. While watching the first MiG-23 explode, a member of the formation shouted for him to break, as a Syrian MiG-21 closed in on him from the right. Rafi used the F-16's superior turning performance of the F-16 to get behind the MiG-21and downed it with the aircraft's internal Vulcan canon. During the mission debrief it was learned that all three kills occurred within 45 seconds! On March 31, 2003 F-16A no.116 was transferred from the Negev squadron to the Flying Wing squadron who transitioned from the A-4N/TA-4J to the F-16A/B.



Left: A March 1975 PLO terrorist attack on the Savov Hotel situated on the coast of Tel-Aviv pointed out the need for a long range shore patrol aircraft. Using surplus IAI model 1123 Westwind airframes it was decided upgrade them to model 1124 standards with the addition of a fuel saving Garret TFE731-3 turbofan engines and a Litton model APS-504(V)2 marine search radar. Three Sea Scans were introduced into service with the International Transport squadron in 1979, serving alongside the Boeing 707 and wearing the same squadron insignia and colors on its motif. Sea Scans no.927 (4X-JYJ), no.929 (4X-JYR) and no.931 (4X-JYO) are currently painted in an overall RAL7023 Betongrau (~FS36280) Haze Grey finish with no identification features applied to the wings.



Above: On June 23, 1997 the IAF accepted its first of five Aerospatial model AS565MA Panther in the summer of 1996 to coincide with the delivery of the Israeli navy's SAAR 5 missile boats. The Aerospatial Panther was given the name "Atalef" (Bat) which was first used for the Grumman Mohawk. The "Atalef" squadron was established on March 12, 1997 and adopted the squadron insignia first applied to the Dauphin helicopters. The "Atalef" retains the Dauphin's upper surface FS25185 blue over FS36375 Light Ghost Grey with the addition of a new "Bat" motif applied to the fin.



Left: HH-65A Aerospatial Dauphin - In mid-1985 the IAF purchase a pair of HH-65A Aerospatial Dauphin helicopters directly from the US Coast Guard for use on the Sa'ar 4 missile boats. The pair were given numbers 901 and 905 and entered service in their original USCG colors of FS27875 white and FS12197 red-orange with yellow tipped black rotor blades. In February of 1988 a new low visibility scheme was adopted consisting of a shade of blue mixed using 60% FS35090 with 40% FS36320 (slightly bluer then FS25184) over FS36320 Dark Ghost Grey with yellow tipped FS24088 Olive Drab main rotor blades.



Above: The IAF placed into service thirty Cessna model U206C/D/E six seat light planes between 1968 and 1970 and another six attrition replacements in 1984. The aircraft known as the "Tzesna" (Cessna) in the IAF served initially with the Flying Camel squadron until the delivery of the twin engine Beechcraft B80 Queen Air. In 1974 the "Tzesna" (Cessna), the six Queen Air's and a pair of Islander transports were joined to form a second light transport squadron based at Sde-Dov airfield on the outskirts of Tel-Aviv. The Tzesna's were given non-consecutive numbers 010 through 075 and retained their 1970's vintage scheme till removed from service in March 1997. The wing identification number and roundels applied to the top left and bottom right wings and FS12197 red-orange spiral on a brown spinner.

Right: Twelve Beechcraft B80 Queen Air two engine transports entered service with the IAF in the beginning of 1974. They served alongside the Cessna model 206U in the IAF's second light transport squadron. The B80 named "Zamir" (Nightingale) by the IAF was used primarily in the VIP transport roll and in later years as the IAF flight school's primary two engine familiarization and navigation trainer. The Zamir was retried from service in 2003 and replaced by the Beechcraft 200. Throughout it's service with the IAF, the Zamir wore it's original 1970's vintage four color camouflage with wing identification number and roundels applied to the top left and bottom right wings and FS12197 red-orange spinners.



Above: The Socata model TB20 Trinidad named "Pashosh" (Graceful Prinia) by the IAF began replacing the Cessna model U206 in January 1995. The "Pashosh" was painted gloss white over FS36375 Light Ghost Grey with a blue cheat line. The spinner, wing tip leading edge stripe are FS35090 blue. The Shield of David roundels are applied only on the fuselage leaving the upper and lower wings with no identification features. The Pashosh was removed from service during 2004 due to its fragile construction and poor takeoff performance in high temperatures which deemed it uneconomical for overhaul.





Above: With the introduction of FS30145 medium brown on IAF helicopters in 1985, Flying Camel squadron Do-28 Agur (Crane) surveillance aircraft were painted FS30145 medium brown on top and RAL7023 Betongrau (~FS36280) Haze Grey underneath. Black identification numbers were applied to both sides of the fuselage as well as the top left and bottom right wings. The 55cm diameter low visibility roundels were applied outboard of the wing numbers and fwd of the fuselage numbers. The roundels consisted of a FS35109 blue Star of David with FS36463 grey background circle, which was not needed below the wing. During June 1990, Do-28 no.22, flown by Flying Camel wing commander Israel, intercepted a PLO speedboat heading for the shores of Tel-Aviv. To drive the speedboat out of coarse, he flew his unarmed Do-28 literally over the heads of the terrorists until they had no choice but to divert coarse to the shores of Nitzanim where a pair of Cobras greeted their arrival.



Above: DC-3 Dakota (manufacture s/n 6223) was the oldest Dakota in service with the IAF. It was obtained from South Africa in 1948 with ZS-DCZ registration and was initially given IAF identification number 1401. It was retired from service on January 30, 2001 with Israeli civil registration 4X-FMF and IAF identification no.040. The Dakota ended flight service with the IAF in appropriate retirement color of overall RAL7023 Betongrau (~FS36280) Haze Grey with FS36463 grey fabric covered control surfaces. Dakotas had Star of David roundels applied atop the left wing and beneath the right, with 4X-FM_ civil registration code applied to the opposite wing surfaces.



Left: As was the case during the Yom-Kippur War the need for the Arava arose again at the outbreak of the June 5, 1982 war. This time the Arava was to remain in service with nine airplanes entering service with the IAF between 1982 and 1989. Two sand/green/brown over RAL7023 Betongrau (~FS36280) Haze Grey pilot trainer Arava's (4X-JUA & 4X-JUC) numbers 101 and 303 operate alongside overall FS36280 Haze grey Arava's 4X-JUD/E/F/G/H/I nose numbers 205/209/211/212/215/217 respectively.



Above: The IAF introduced the Beechcraft RC-12D "Kookiya" communications intelligence version of the Beechcraft B200CT at the end of 1984 to serve alongside transport versions of the B200C/CT "Tzofit" and new Beechcraft Bonanza "Hofit" in the light transport squadron who were recently named the "Kings of the Air" squadron. The "Kookiya," entered service in an overall FS36300 pale grey finish and had black identification numbers applied to the nose section vertical fin and top left and bottom right wing surfaces. No Star of David national roundels or squadron insignia are applied to the "Kookiya". Vertical fin root antenna fairing, fwd radar dome, aft fuselage side looking radar fairings, inboard engine surfaces, and ,fwd windshield anti glare panel, and the aft face of the propeller blades are all flat black. 4X-FS_ initially applied to the aft fuselage, aft of the side looking radar have been omitted in the early 1990's.

Right: In the year 2002 the IAF flight school chose a successor to their Piper Super Cub primary trainer, the airplane chosen was the German made Grob G120A-I. The first three Grob trainers named "Snonit" (Swallow) by the IAF were accepted by Elbit flight services on October 27, 2003 in a ceremony held at the IAF flight school at Hatzirim. These airplane are now owned by the IAF who only pays for their use by the hour. As such they do not carry IAF roundels, only the flight school's insignia and 4X civilian registration codes that are applied to the fuselage and bottom of the left wing, with no identification applied to the upper wing surfaces. The airplane is painted gloss white with FS11310 red trim.





Above: The Agusta-Bell model 206 Jet Ranger replaced the Alouette II in the light helicopter transport roll beginning in 1972. In addition to its VIP transport roll, several Bell 206's are allotted to the IAF flight school to serve as primary trainers for pilots destined to serve as helicopter pilots. In addition to their original 1970's four color camouflage, some of the Bell 206's were painted overall FS30140 red brown and others FS20095 at the outbreak of the 1982 war. In mid-1980's the overall color was changed to the current FS30145 medium brown. During the Lebanon War, an upright FS 33434 yellow V was adopted for use on all IAF helicopters and is used as an additional identification aid till this date of writing (June 2005).



Above: The November 1996 delivery of US Army surplus AH-1F Cobras enabled the IAF to integrate the Cobra into the advanced pilot training curriculum. These AH-1F Cobras entered service in their original US Army FS34031 black-green camouflage and had FS33655 yellow V applied to the engine access doors and white 600 series numbers applied ahead of the windshield and to both sides of the tail fin.



Above: Piper Super Cub no.114 was purchased in 1983 in the final batch of 25 Piper Super Cubs purchased by the IAF that were allotted numbers in the 101 to 142 range. In the mid-1970's the Super Cubs received an FS17925 white and FS12197 red-orange trim finish to coincide with other flight school airplanes, Tzukit and TA-4J. In January 2003 the Piper Super Cub was retired from service, ending 35 years of operation with the IAF.



Top: AH-64A no.801 of the Hornet squadron is seen parked in a quick reaction alert configuration with two external fuel tanks, and eight AGM-114 Hellfire missiles under its stub wings. The 8XX series Apaches, named Peten (Viper) in Hebrew arrived in Israel on September 12, 1993 and entered into service with the Hornet squadron. The Apache retained its overall FS34031 black-green camouflage scheme well into 2005, until a new "Tiger Scheme" was applied to all 8XX and 9XX to all IAF Peten helicopters. Before the introduction of the AH-64D Apache Longbow "Saraf" to Hornet squadron service on April 10, 2005, all IAF AH-64A Petens were transferred to the Magic Touch squadron.



Upper Left: AH-64A no.966 - Between 2001 and 2002 the IAF sought to replace the FS34031 black-green overall finish applied to the Blackhawk "Yanshuf" and the Apache "Peten". The Turning Sword's evaluated three different schemes on its Blackhawks; sand and green, sand and brown and stone-yellow and brown. The Hornet and Magic Touch Apache squadrons applied the FS34227 green, FS33531 sand and FS36375 Light Ghost Grey scheme on Peten 835 and 966 respectively. Magic Touch squadron pilots took a dislike to the sand and green scheme due to its vivid colors and similarity to those applied to Syrian helicopters and rejected the "Syrian scheme" in favor of the "Tiger scheme" as applied to Peten no.967.



Lower Left: AH-64A no.967 of the Magic Touch squadron has the distinction of being the first IAF helicopter to down an aircraft. On May 24, 2001, wearing an FS33448 Stone-Yellow, FS30145 Brown over RAL7023 Betongrau (~FS36280) Haze Grey evaluation scheme, "Peten" (Viper) no.967 trailed a Cessna 172 making its way from Lebanon into Israel. Thirty-three minutes of repeated efforts to persuade the Lebanese pilot to land, including firing tracer rounds across his flight path, went unheeded. Fearing that the plane may be packed with explosives, the Peten pilot distanced himself from the Cessna and downed him with an AGM-114 Hellfire missile.

Right: The First Cobra squadron adopted the FS33531 sand snake motif in the spring of 1995. With the Israeli - Palestinian peace talks reaching a stalemate in the July 2000 Camp David meeting with Ehud Barak, Yasser Arafat and William J. Clinton, the Palestinians use Ariel Sharon's September 29, 2000 visit to the temple mount as an excuse to start a new war called Intifada Al-Aqsa. On October 12, 2000 the first fatalities of the new war were two IDF reservists that lost their way in the streets of Ramallah and are lynched by a Palestinian mob while held at a Palestinian Authority police station. In retaliation, First Cobra squadron "Tzefa" (Vipers/Adder) launched TOW missiles at the empty police station as warning to the PA of the IAF's capabilities.





Above: The year 2002 saw the Intifada Al-Aqsa's greatest number of suicide attacks averaging 5 a day. Within the first three months of 2002, the number of Israelis that lost their lives rose from 208 at the end of 2001 to 415 by the end of March 2002. On the eve of Passover, March 27, 2002 a Hamas suicide bomber entered the Park hotel in Netanya and murdered 29 diners and injured another 130. The following night, operation "Defensive Shield" was launched as IDF ground forces entered Palestinian Authority territory in the West Bank that was given to them during the Oslo Peace Process. IAF Cobras optimized for attacking stationary targets such as snipers firing from inside buildings, conducted 85% of the operations during the offensive. With many of the Hamas and Jihad leaders routed out of the West Bank, the second Cobra squadron used the May – June 2002 IuII in fighting to apply an FS34031 black green snake motif to their helicopters. All IAF Cobras retain their 1985 vintage overall FS30145 Helicopter Brown color with FS33434 yellow identification "V".



Left: The IAF introduced five passenger Bell Model 206L "Long Ranger" civilian helicopters to the Light Helicopter squadron at the end of 1987. During Intifada Al-Aqsa, the Light Transport squadron used their Bell 206 helicopters to hunt after suicide bombers on their way to cities and towns throughout Israel. The Bell 206L retained its original overall FS30145 Helicopter Brown color with FS33434 yellow identification "V" until their transfer to the Israeli Police Helicopter unit in 2004.



Above: The first five of 15 "Yanshuf-2" UH-60L/S-70A-50 models of the Blackhawk arrived in Israel on May 27, 1998. The Yanshuf-2 replaced the Bell 212 of the Turning Sword squadron that operated along side the initial batch of Blackhawks that arrived in 1994. The Yanshuf-2 have external fuel tank carriage capability and provisions for the attachment of an external air to air refueling probe. On January 3, 2002 Yanshuf-2 helicopters participated in operation Noah's Ark air lifting Shaietet-13 Israeli Navy seals that seizing the Karin-A freighter. The freighter was loaded with 50 tons of small arms, anti personnel, anti tank and anti aircraft weapons destined to fuel Intifada Al-Aqsa, curtsey of Hizbullah headquartered in Lebanon. Yanshuf-2 Blackhawks were delivered to the IAF in an overall FS34031 black-green camouflage, with black main and tail rotor blades. An FS23594 yellow identification was applied in Israel and the 9XX tail number was changed to 8XX once they were upgraded with new ECM, RWR and night vision compatible cockpit equipment.



Left: On August 8, 2002 the Southern Medium Helicopter Transport squadron retired its Bell 212 (UH-1N) helicopters in favor of a mixed fleet of refurbished UH-60A and new built UH-60L Yanshuf-2 helicopters. UH-60A Blackhawk number 607 identification number was changed to 707 as a result of refurbishment. It was repainted in the new paint scheme using paints of local manufacture which give it a different color hue than UH-60L Blackhawks painted by Sikorski. Yanshuf no.707 fuselage is painted FS33448 Stone-Yellow, FS30145 brown with RAL7023 Betongrau (~FS36280) Haze Grey undersurface. The identification V is FS23594 yellow and the squadron insignia background is painted FS13591 Lemon Yellow. The main and tail rotor blades remain semi-gloss black.



Above: Blackhawk no.553 is one of 24 new built "Yanshuf-3" Sikorsky model S-70A-55 Blackhawks delivered to Israel beginning in July 2002. These helicopters were painted at the Sikorsky factory using US manufactured colors, which differ in hue from those applied in Israel. Their scheme consists of FS33448 Stone-Yellow, light FS30219 brown over FS36463 grey (not FS36473 grey reported by some – which is a bit green in huge). Identification V and black rotor colors are the same for all Blackhawks. IAF painted Blackhawks have the Stone-Yellow and Brown top surface camouflage applied to the bottom of the horizontal stabilizer where as Sikorski Blackhawk stabilizers are painted grey underneath.



Above: Peten no.907 is taxing for take off. During 2004 all AH-64A Petens were transferred to the Magic Touch squadron, in the process they were painted in the "Tiger" scheme consisting of FS33448 Stone-Yellow, FS30219 Tan (instead of FS30145 as applied on the trial scheme Peten no. 967) with the undersurface painted Grey FS36463.





Above & Left: The first three Boeing AH-64D Apache Longbow "Saraf" (Black Viper) helicopters were introduced into Hornet squadron service in a ceremony held at Ramon air base on April 10, 2005. Saraf tail numbers 723, 726 and 733 arrived a week earlier on board a Russian Antonov AN-124-100 transport that air lifted them from the Boeing Messa, Arizona plant directly to Ben-Gurion international airport in Lod. The Saraf helicopters arrived painted in camouflage colors of FS33448 Stone-Yellow, light FS30219 brown over FS36463 grey in a pattern which is different than that used on the Peten that are painted in Israel.



Above: CH-53 helicopters were amongst the first IAF helicopters to receive an overall FS30095 overall brown camouflage scheme, in close proximity to the 1979 Litani operation in Lebanon after the PLO hijacking of a civilian bus along the Haifa – Tel-Aviv road. During the 1982 Lebanon War, an FS33434 yellow identification "V" was applied to the aft fuselage, as was applied to all IAF helicopters. In the mid-1980's the FS30095 dark brown was replaced by an overall FS30145 brown which was lighter in color. This photo clearly shows the difference in the FS30219 tan as applied to the external fuel tanks and FS30145 helicopter brown applied to the fuselage. The helicopter's main rotors on this aircraft have trimmed down tips for noise reduction and are painted semi-gloss black with FS34227 hubs. The tail rotor blades are painted FS20140 red-brown with FS34227 hubs. Note the external supports that reinforce the stub wing to the fuselage. The "Yassor's" 906 identification number is applied to both sides of the aft fuselage and nose section (underneath the windshield).

Right: The IAF operates several versions of the Raytheon - Beechcraft B200 King Air named "Tzofit" (Palestine Sun Bird). The Tzofit is fitted with an underbelly infra red optical system and communications gear that enable its use for nighttime battlefield management. During the 2002-2003 Intifada al Agsa, Palestinian suicide bomber spree, the Tzofit proved its worth over the dense population centers of Jenin, Jeballia, Hebron, Gaza and numerous other locations. The Tzofit aids infantry commanders see the enemy that is perched on a roof top and the sniper that is firing from inside a multi story building during night time raids aimed at routing out suicide bombers and their operators. The Tzofit are painted overall FS36300 light grey with only a squadron insignia and identification numbers applied - no Star of David identification roundels are applied.

Below: On September 10, 2004 the IAF signed an agreement with Raytheon/Beechcraft for the purchase of 18 Beechcraft Bonanza model A36 five seat light transports with option for six more at a later date. The first three aircraft, tail numbers 301, 304 and 309 arrived in Israel on December 5, 2004 to serve alongside the Beechcraft B200 King Airs of the Air Kings squadron and as light transports between air bases throughout Israel. The Bonanza is painted in FS17925 white and FS16251 grey, with white wheel well.







Above: The first pair of F-16I Sufa aircraft tail numbers 407 (s/n 00-1005) and 408 (s/n 00-1006) were introduced into Negev squadron service on February 19, 2004. The Negev squadron was chosen as the first squadron to operate the Sufa after operating the F-16A/B Netz for twenty years, being one of the first three squadrons to introduce the F-16 to IAF service in 1980. Throughout that period, the Negev squadron was given the task of training pilots to fly and fight in the F-16. Being the first squadron to operate the IAF's newest fighter, the Negev squadron will continue teaching pilots to fly and fight in the IAF's newest version of the F-16, this time the Sufa. The formation photo shows F-16I no.253 (s/n 00-1004) and no.415 (s/n 00-1010), tail number not visible in this photo) fitted with a pair of AIM-120 AMRAAM, two Mk.84 - 2000 pound laser guided bombs, two 370 gallon fuel tanks, CFT's, Rafael Lightning II and AN/AAQ-13 LANTRIN pods.



Left: The F-16I Sufa is identified by Lockheed Martin Aerospace as Block 52, F-16D as it appears on the left side of the forward fuselage. Sufa number 425 (s/n 00-1014) of the Bat squadron is seen with its airbrakes open as it approaches for a landing. The Bat squadron was chosen by the IAF to be the second IAF squadron to operate the Sufa. The Bat squadron previously operated various versions of the F-4 Phantom II including the Kornass 2000 from 1970 until the spring of 2003. The Bat squadron reopened as the IAF's second Sufa squadron on December 28, 2004 operating alongside the Negev squadron from Ramon air base. With the delivery of the 102nd Sufa to the Israeli Air Force, due at the end of 2008, the IAF will become the second largest operator of the F-16 with 362 aircraft delivered in comparison the USAF's 2,230 F-16s.



Above: In August 2003, the Hammer squadron finalized their squadron's tail motif to the version shown in this photo. The camouflage colors applied to the Ra'am are the same as applied to the F-16 and Kfir C7 consisting of FS33531 sand, FS30219 brown and FS34424 (RAF BS381C/210 Sky) green over FS36375 light ghost grey. Note that the F-15I's Ra'am (Thunder) are not individually named as opposed to the F-15A/B/C/D Baz (Falcon).



Above: F-15D no.715 named "Shoshanat Ha' Ruhot" (Compass Card) is seen with the "Improved Eagle" vertical fin motif applied to the vertical fin beginning in December 2001. This new built F-15D was received on May 4, 1992 as part of Peace Fox IV purchase of five attrition replacement Eagles, to which 700 tail numbers were assigned. After 25 years of service, IAF Eagles undergoing "Improved Eagle" upgrade have their airframe overhauled, and avionics upgraded to enable launch of a new generation of all aspect Python IV and Python V IR guided air to air missiles, AIM-120 AMRAAM radar guided missiles and an array of optically guided air to ground weapons such as the Popeye. Since its IAF service entry in December 1976, the Eagle termed "Baz" in the IAF, retained its original FS36375 and FS36320 Ghost Grey Colors.



Above: After each day's combat operations, 101 squadron pilots made their way to the "Atom Bar" on the coas Aviv for a drink. During one such evening, the pilots decided that their fledging squadron needs a squadron in

ספריית מכון פישר בית חיל האויר

Colors & markings of the Efrati, Yoav 358.4(9) EFR lifornia, Stan Andrews drew up a winged skull wearing a flying cap th lk screen poster applied to the squadron's Avias and Spitfires. Fifty-sir 1, 2004 Stan Andrew's angle of death was restored to its former glor and laser metal cutting technology and applied to the vertical fin of the squud F-16C Barak fighters. Since its introduction of the F-16 to IAF secons have been painted in desert camouflage colors of FS33531 sand, Fundamental control of the F-36 to IAF secons have been painted in desert camouflage colors of FS33531 sand, Fundamental control of the FS36375 Light Ghost Grey underneath.