

#### Available references

##### Books

*Hrvatski Zrakoplovi* (Croatian Aircraft) by Vojislav Jereb and Danijel Frka, published by Carski Husar, Zagreb, 1994.

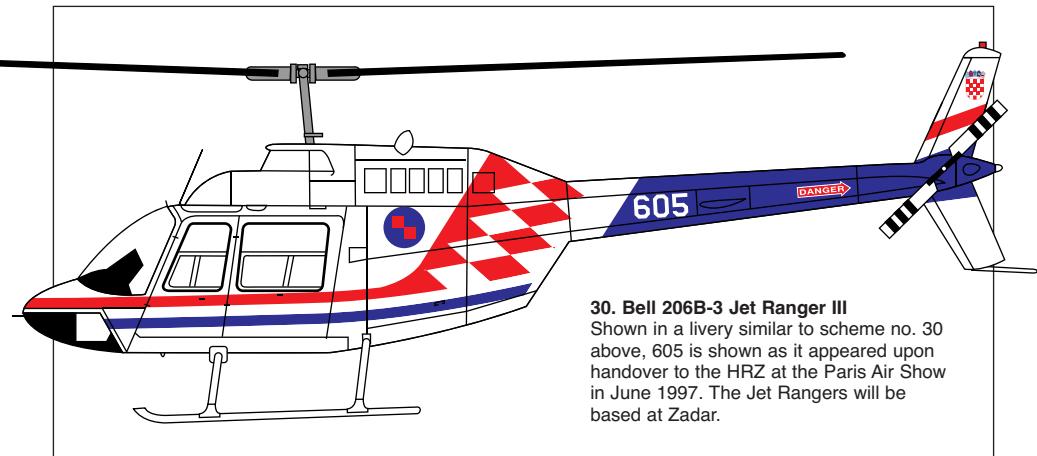
##### Magazines

*Aero-Plan* – No. 1, 1994; *Air Action* – May 1992, February 1993; *Air Forces Monthly* – August, December 1992, March, August 1993, January 1994, August, October, November 1996, March, August 1997; *Air International* – March 1996, August 1997; *Aircraft Illustrated* – June 1996

*Hrvatski Vojnik* (Croatian Soldier) – Various issues, 1993-1997; *Small Air Forces Observer* – March 1994, March 1996.

##### 1/72 scale decals

*Model Aire International* – Sheet DCL 6, featuring seven Mikoyan Gurevich MiG-21bis/UM schemes and three Mil Mi-24V schemes; *Delta Decals* – Sheet 72-005, featuring schemes for MiG-21bis, Mil Mi-24V, Mil Mi-8 and Cessna 172; *Blue Rider* – Sheet BR802, featuring schemes for UTVA-75, MiG-21bis and three Antonov An-2s.



## Captions to figures on page 47

### 31. Croatian shield

The Croatian shield, forming the centrepiece of the national flag, served as the main aircraft insignia from 1991 until mid-1993. After 1993 the shield became the official tail marking on HRZ aircraft. Above the shield are the crests of the five regions of Croatia. From left to right these are: *Illyria* – Yellow six pointed star and White crescent on Light Blue background; *Dubrovnik* – two Red stripes on Dark Blue background; *Dalmatia* – three Yellow with Black detail Venetian lion heads on a Light Blue background; *Istria* – Yellow goat with Black details on Dark Blue background; *Slavonia* – Black Marten on Red stripe edged in White on Light Blue background, with a six pointed Yellow star above the Red stripe.

### 32. Croatian roundel

Between June and August 1993 a new national insignia was introduced, taking the form of a Dark Blue roundel on wings and fuselage with diagonally opposed Red squares. See pages 20, 21, 32, 35, 41, 44 & 45.

### 33. Croatian Army shield

This interim marking scheme appeared during the early months of the war on aircraft of the *Cakovec Light Combat Aircraft Squadron*. It consists of a Croat shield with Silver/Grey squares instead of the more usual White, and the legend *HRVATSKA VOJSKA* (Croatian Army) in Silver/Grey underneath on a White background. These industrially produced Croatian Army stickers were frequently to be seen on aircraft in a torn and tattered condition. Aircraft carrying these stickers included the UTVA-75 and Antonov An-2 Colt. See pages 12, 14, 22 & 23.

### 34. HZS unofficial badge 1

The 4th Brigade based at Split was the first unit to wear military insignia – most aircraft during the early part of the war carried no national markings, though most were camouflaged. This unofficial HZS insignia appeared on the 4th Brigade's UTVA-75s and Cessna F.172N. See page 15.

### 35. HZS unofficial badge 2

Another version of the HZS badge appeared on the 4th Brigade's Antonov An-2, with the legend SZO SPLIT underneath the shield. See page 20.

### 36. SZV Osijek badge

Worn by aircraft no. 5 of SZV Osijek, an Antonov An-2 Colt, this badge features the Black Marten of Slavonia.. Similar badges were worn by other aircraft of this unit. See pages 23 & 26.

### 37. Osvetnik Dubrovnik

Worn by MiG-21bis '102' of the 1st Fighter Squadron, this shield carries the arms of Dubrovnik, featuring the city's patron saint, St. Blase. The Croat legend translates as 'Avenger of Dubrovnik'. See pages 36, 37 & 38.

### 38. Osvetnik Vukovara

MiG-21bis '103' of the 1st (later the 21st) Fighter Squadron carries the arms of the city of Vukovar. This badge has been used on both the Light Grey and camouflaged colour schemes of '103'. The legend translates as 'Avenger of Vukovar'. See pages 37 & 38.

### 39. 1st Fighter Squadron badge

This squadron marking initially appeared only on the forward port fuselage of the 1st Fighter Squadron's MiGs, but was later used on both fuselage sides on camouflaged examples. See pages 36, 37 & 38.

### 40. 22nd Fighter Squadron badge

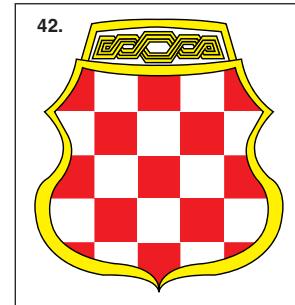
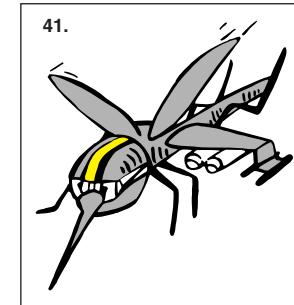
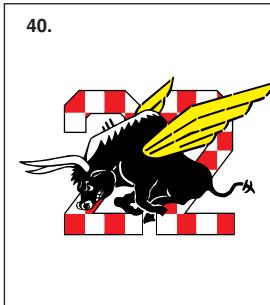
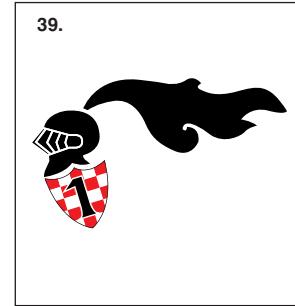
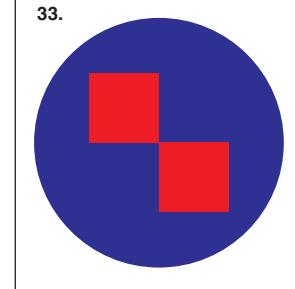
The finalised design for the 22nd Fighter Squadron badge (not yet noted in use on any of the Squadron's aircraft).

### 41. Gnat

This badge appears on the forward fuselage of Croatia's Mil Mi-24V gunships. See page 42.

### 42. Herceg-Bosna shield

The only known (and rarely photographed) insignia used of the aircraft of the Herceg-Bosna air arm.



Since the original release of this *Air Force Special* on Croatia and Bosnia in 1996, further information that sheds more light on the minutiae of marking details from those air arms has been made available. This update was originally published in issue 7 of *Insignia Magazine* in December 1997.

This new information comes from several sources, the primary one being our Croatian correspondent Boris Greguric.

#### UTVA-75 c/n 53239 (001 4.brg)

This machine, from *SZO 4 Brigada* (renamed *SZO Split* in February 1992) also carried underwing markings (see **Diagram 43** and **Photo A**). These were quickly applied, as were other markings, in 1992 on both wings, and made up of masking tape.

The crew applying these shields did not have any Medium Blue masking tape, so Dark Blue was applied on these areas, Black being used on what should have been Dark Blue areas. It should be noted that these shields were graphically similar in appearance to those noted above on Antonov An-2 '006'. The letters 'HZS' for *Hrvatske Zrakne Snage* were also applied under these shields in 15cm high Black letters. Close examination of *SZO Split's* UTVA

also shows that the 'crowns' above the shield were very simple, with a White background and Blue details.

It is also apparent on photographic evidence that the Olive Green overpainting of the underside of this aircraft was thin and unevenly applied. A darker Olive Green patch is visible over the former civil registration letters on the underside of the port wing.

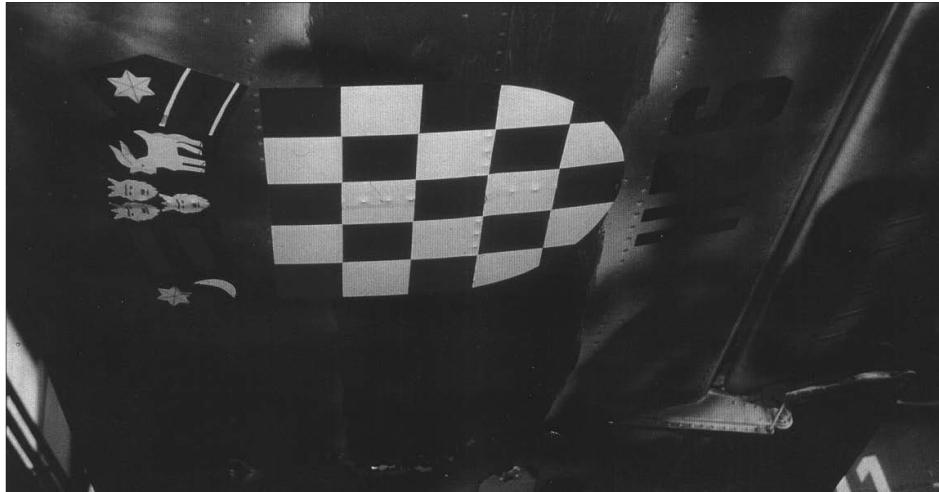
These markings remained on the UTVA-75s until late 1994, when a civilian style colour scheme was applied. More details of this aircraft can be found on page 15 of this book.

#### WSK Antonov An-2 c/n 1G8648 (006)

Information recently received indicates that this aircraft carried non-standard Croatian shields under each lower wing (see **Diagram 44** and **Photo B**). These shields used graphic elements somewhat larger than the official Croatian shield that appears in the national flag. The former German civil registration D-FOKA showed through the hastily applied paint scheme during 1994, until the aircraft was repainted in 1996.

#### WSK Antonov An-2 c/n 1G21408

This aircraft, wearing an Olive Drab, Tan and Dark Green colour scheme (as illustrated on



**Photo A:** The lower port wing surface of UTVA-75 '001 4.brg' as detailed in the accompanying text. Although rather dark, this picture shows the crude application of the Croatian shield using Red, White, Dark Blue, Yellow and Black masking tape.



**Photo B:** Antonov An-2 '006' showing the application of a Croatian shield on the wing undersurfaces. The civil registration was previously D-FOKA, traces of which can be seen to the right of the shield. See pages 20 and 21.



43. UTVA-75 '001 4.brg'  
underwing shield



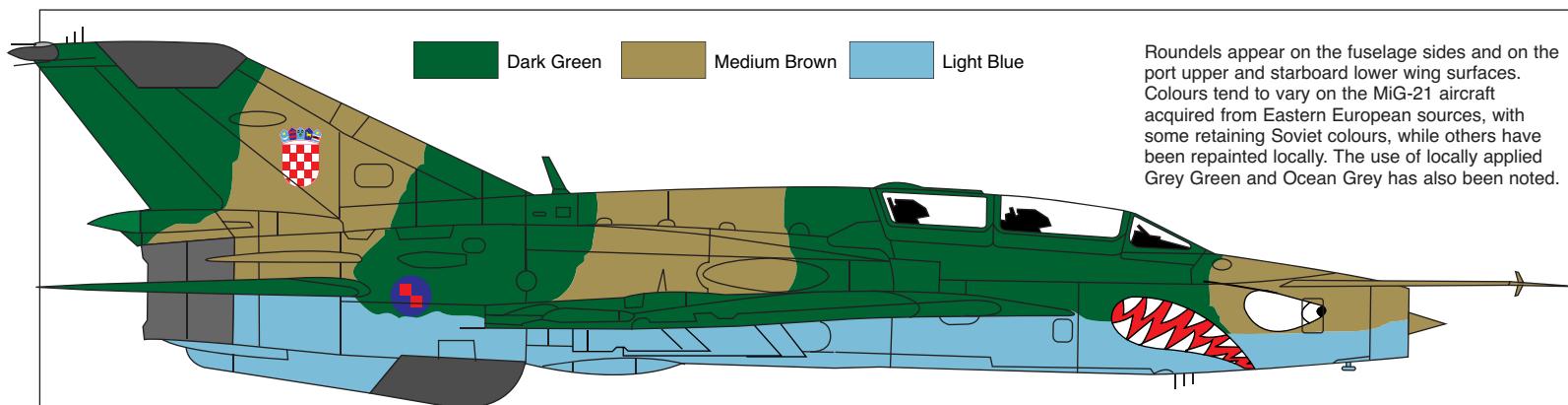
44. Antonov An-2 '006'  
underwing shield



*Photo C:* Antonov An-2 c/n 1G214-08, shown during the winter of 1993/1994. Note the Yellow *Gremlini* inscription under the starboard cockpit. The final style of Croatian insignia is carried on this machine, with roundels on the fuselage and on the port upper and starboard lower wing surfaces. See pages 20 and 21 for more details.



*Photo D:* A close up of the markings on Ivan Selak's MiG-21bis, as described in the text on the left. AFS2 has details of both natural finish and camouflaged MiG-21s.



#### 45. Mikoyan Gurevich MiG-21UM

This MiG-21UM, serial number unknown, wears a camouflage pattern in Dark Green and Medium Brown over Light Blue lower surfaces. Seen at Pleso Air Base during 1997, this 1st Squadron aircraft wears a Red and White sharkmouth design, with the details outlined in Black. No Knight's Head squadron badge is worn on this aircraft. The Croatian roundel is Blue with Red squares, and the Croat shield on the fin follows the colours of the national flag, utilising Red, White, Dark Blue, Light Blue and Yellow, with Black detailing.

Roundels appear on the fuselage sides and on the port upper and starboard lower wing surfaces. Colours tend to vary on the MiG-21 aircraft acquired from Eastern European sources, with some retaining Soviet colours, while others have been repainted locally. The use of locally applied Grey Green and Ocean Grey has also been noted.

page 20/21 of this book), also wore the inscription *Gremlini* in Yellow under the cockpit on the starboard side (see *Photo C*). This marking is believed to have been worn between Autumn 1993 and the end of 1994.

#### MiG-21bis 102 & 103

The following revised chronology applies to the second and third MiG-21s acquired by Croatia:

15 May 1992 – aircraft were flown from Podgorica (Montenegro) to Pleso and Split respectively. Former Yugoslav markings were removed, and Croatian coat of arms and flag were applied within a week of arrival. The Split based MiG-21 '103' retained its Yugoslav wing code '167'. A portion of the figure '6' also remained visible on the starboard nose.

Late 1992 – 95mm high White code numbers '102' and '103' were applied to fins.

Early 1993 – 1st Squadron Knight's Head unit insignia was applied to '102' and '103' on