

# CLOUD FORMATIONS

Issued 26<sup>th</sup> April, 2005

*(Extracted from Philatelic Bureau Bulletin No 2 of 2005)<sup>2</sup>*

Clouds are a world-wide phenomenon and are not restricted to the skies of Zimbabwe where we are blessed with excellent weather most of the time as well as beautiful blue skies. The descriptive text below of cloud formations is a meteorological description of how clouds are formed and does not relate solely to the cloud formations experienced within the borders of Zimbabwe.

## CLOUD FORMATIONS

Moist air rises when winds force it against a mountain or blow it over heavier, colder air. As the moist air rises it cools and condenses into minute droplets of water, forming clouds. When the droplets in the clouds become too heavy to be sustained, they fall as rain. Rainfall belts move northwards and southwards following the apparent movement of the sun, so that some places, such as the Mediterranean Sea, have most of their rain in the winter, while others, such as the Monsoon regions, have most of their rain in the summer.

The driest areas on Earth are where winds have blown for long distances over heated lands for example over deserts such as the Sahara or Kalahari deserts in Africa. A local dry area may often be caused by a range of mountains extracting all the rain on its windward side leaving what is called a rain-shadow on its leeward side. A regional example of this is the Drakensberg and Magaliesberg Mountains in South Africa producing the rain shadowed desert of the Kalahari Desert in Namibia.

The different cloud formations result partly from the temperature at which condensation takes place. When condensation occurs at temperatures below freezing, clouds are composed of ice crystals; those that form in warmer air usually consist of water droplets.

Air motion associated with cloud development also affects formation. Clouds that develop in calm air tend to appear as sheets or stratified formations; those that form under windy conditions, or in air with strong vertical currents, have a towering appearance such as the cumulonimbus or thunderstorm cloud.

### **\$6,900.00 - Cirrus - High Clouds**

8 kms plus above the Earth. These clouds are composed of ice particles found at average levels of 8km or more above the Earth. The family contains three principle genera. Cirrus clouds are isolated, feathery and thread-like, often with hooks or tufts and are arranged in bands. Cirrocumulus clouds form small white fleecy balls and wisps arranged in groups or rows.



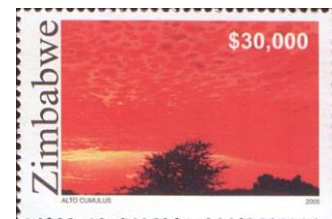
### **\$13,800.00 - Nimbo Stratus - Low Clouds**

Generally less than 1.6 kms above the earth. These clouds are also composed of water droplets, generally less than 1.6 kms high Three principal forms are in this group. Stratocumulus clouds are large rolls of clouds, soft and grey looking which frequently cover the entire sky. Because the cloud mass is not very thick, blue sky often appears between breaks in the cloud deck. Nimbo-Stratus clouds are thick dark and shapeless, they are precipitation clouds from which as a rule, rain or snow falls. Stratus clouds are sheets of high fog. They look like flat white blankets, usually less than 610 metres above the ground. When they are broken up by warm rising air, the sky beyond usually appears clear and blue.



### **\$30,000.00 - Alto Cumulus -Middle Clouds**

3 to 6 kms above the Earth. These clouds are composed of water droplets. Two principal genera are included in the family. Altostratus clouds appear as a thick grey or bluish veil through which the Sun or Moon may be seen only diffusely, as through a frosted glass. Altocumulus clouds have the appearance of dense fleecy ball or puffs somewhat larger than Cirrocumulus



### **\$40,000.00 - Cumulo Nimbus Clouds with vertical development**

Generally, from less than 1.6 kms to more than 13 kms high. Two main forms are included in this group. Cumulus clouds are dome shaped woolpack clouds most often seen during the middle or latter part of the day, when heating produces the vertical air currents necessary for their formation. These clouds usually have flat bases and rounded tops. Cumulo-nimbus clouds are dark, heavy looking clouds rising high like mountains into the atmosphere, often showing an anvil shaped veil of ice clouds with a false cirrus at the top. These thunder clouds are usually accompanied by heavy, abrupt showers and lightning. An exceptionally group of clouds contain the nacreous, or Mother of Pearl clouds which occur 19 to 29 km high and the noctilucent clouds, 51 to 56 km high. These very thin clouds may only be seen between sunset and sunrise and are only visible in high altitudes.



### **Catalogue listings**

<b>SG</b>	<b>ZSC<sup>1</sup></b>	<b>Value</b>	<b>Description</b>
1156	581	\$6,900	Cirrus
1157	582	\$13,800	Nimbo-stratus
1158	583	\$30,000	Alto Cumulus
1159	584	\$40,000	Cumulo-nimbus

## Technical details

<b>Stamp size:</b>	Sheet stamps: 42 x 38 mm
<b>Sheet Size:</b>	50 stamps (5 rows of 10 stamps), two panes per printed sheet
<b>Artist:</b>	Cedric Herbert
<b>Paper:</b>	ZSC paper type J: paper described by Zimpost as “Chancellor Litho PVA Gummed Postage Stamp Paper”. This paper is produced by Tullis Russell Coaters of Glenrothes, Fife, Scotland. Under UV there is no fluorescence either front or back, the stamp appears to be very dark
<b>Print colours:</b>	Cyan, magenta, yellow & black
<b>Perforations:</b>	SG 14½, ZSC 14¼ Top margin: Perforated through Other margins: Imperforate
<b>Printer:</b>	NatPrint, Harare, Zimbabwe
<b>Printer’s Imprint:</b>	Bottom Margin, below Row 10 Column 3. Imprint printed in black
<b>Cylinder numbers:</b>	Top margin above R1/1. Colours from left – cyan, magenta, yellow, black
<b>Colour register:</b>	Type TL 4– round boxed – left margin opposite R1/1. Colours reading down – cyan, magenta, yellow, black
<b>Sheet Value:</b>	Top margin, above R1/5, printed in black
<b>Sheet Number:</b>	Type SN 7 with printed ‘ZIMPOST’ prefix, right margin opposite R/5, reading down
<b>Print numbers:</b>	\$ 6,900            1,094,600            \$13,800    625,400 \$30,000            124,800            \$40,000    124,300
<b>Issue date:</b>	26 <sup>th</sup> April, 2005

## Postal Rates

These postage rates reflected the basic air mail rates for local, Africa and Europe. The postal rates effective from 1<sup>st</sup> December 2004 show the basic air mail rate the rest of the world as \$50,000. The local postal rate of \$13,800 for weight of 20 to 100 grammes, quite why this was issued is unknown.

## Listed varieties

No listed varieties have been noted.

## Unlisted Varieties

There are numerous small dots and specks in the printing of these stamps, particularly in the backgrounds.



**\$6,900:** Three pairs with sheet numbers demonstrating a significant change in colour of this value. In sheet 1311 the sky appears in a sky blue colour, whilst in sheet 4959 the sky is much paler, and then much darker in sheet 6875.

*(Courtesy of Jefferson Ritson)*



**\$13,800:** Three pairs with sheet numbers demonstrating a significant change in colour of this value. In sheet 2605, the colour round the sun is greyish, turning to purple blue in sheet 3214, and then greenish in sheet 5406.



**\$6,900:** Pink mark in centre of sky. Cyl 1A R5/3  
(Courtesy Narendhra Morar)



**\$5,900:** Cyan ink blot bottom left corner. Cyl 1A R9/5  
(Courtesy Narendhra Morar)



**\$13,800:** Black ink blot giving green halo effect. Cyl 1B R3/3  
(Courtesy Narendhra Morar)



**\$13,800:** Magenta 'comet' in clouds, unknown position



**\$13,800:** Green tinges to sky, centre right. Cyl 1B R3/5  
(Courtesy Narendhra Morar)



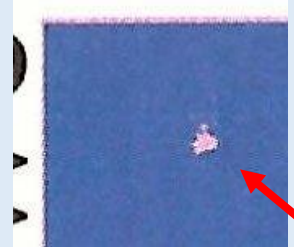
**\$13,800:** 'Tick' in sky left of sun. cyl 1B R7/3  
(Courtesy Narendhra Morar)



**\$13,800:** Black ink blot giving green halo effect, Cyl 1B R10/2  
(Courtesy Narendhra Morar)



**\$13,800:** Lack of black ink above value. Cul 1A R7/5  
(Courtesy Narendhra Morar)



**\$40,000:** Pink flare in sky, top right. Cly 11A R8/3  
(Courtesy Narendhra Morar)



**\$40,000:** cyan blob in sky top centre. Cyl 1A R5/2  
(Courtesy Narendhra Morar)

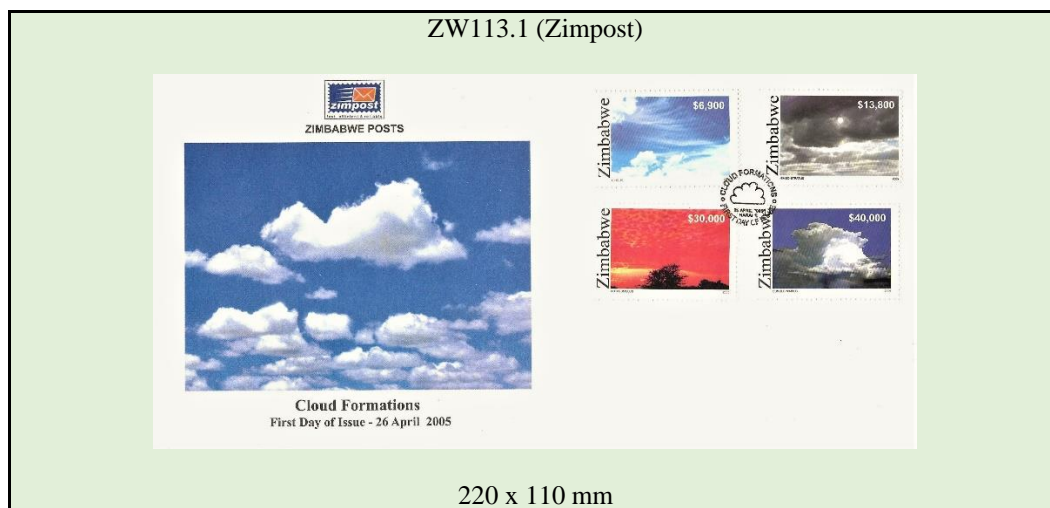


**\$40,000:** Pink flare in sky, centre right. Cyl 1A R10/4  
(Courtesy Narendhra Morar)

## First Day Cover

The cover numbering comes from the catalogue produced by Geoff Brakspear.

A pictorial first day of issue canceller was produced for this issued and was used by the Philatelic Bureau. Other first day cover cancellers continued to be used at main post offices.

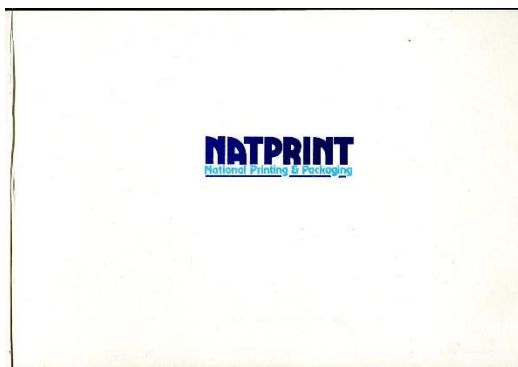


## Related Material

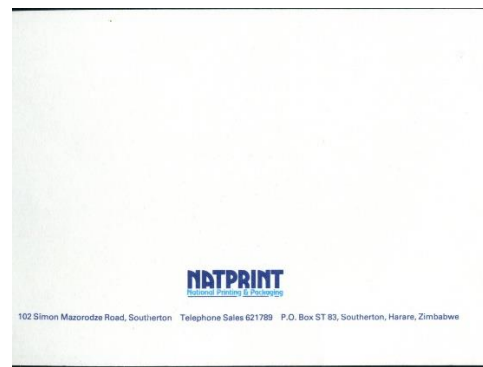
### Natprint Proof Presentation Cards

Presentation cards produced by Natprint with imperforate proofs of the stamps to be issued. The presentation cards were forwarded to the PTC for approval of the final product.

*(Courtesy of Jefferson Ritson)*



Front cover



Inside front cover



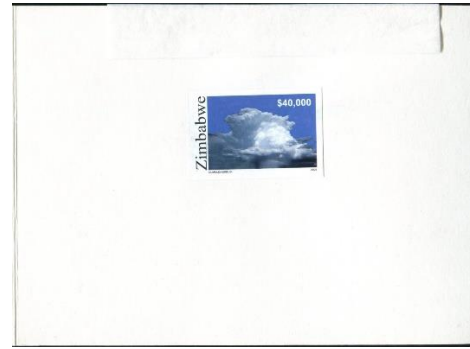
\$6,900 stamp



\$13,800 stamp



\$30,000 stamp



\$40,000 stamp

**Bibliography:**

1. "The Zimbabwean Concise Postage Stamp Catalogue", published by Harare Stamp Company, edited by Ken Allanson, Mike Amos and Geoff Brakspear. The catalogue continues to be updated and expanded by Geoff Brakspear
2. Zimbabwe Post, Philatelic Bureau Bulletin No 2 of 2005