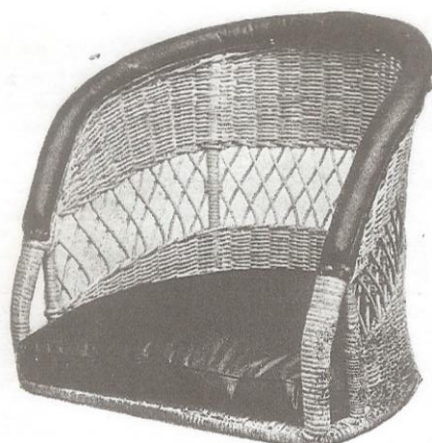


SEATS  
(Wicker).

FOR PRICES,  
STOCKS and De-  
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Parts — see THE AIR-  
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## BASKETRY

## Then and Now

## AEROPLANE SEATS AND BALLOON BASKETS

## BUNTY BALL

During the First World War, baskets were used by the Royal Flying Corps (RFC), the Royal Naval Air Service (RNAS), and the Royal Air Force (RAF). This research looks at the construction of basketwork aeroplane seats, particularly for the Sopwith Camel fighter plane, and balloon baskets.

## Aeroplane seats

The first aeroplane flight took place on 17 December 1903, and within just a few years the military potential of aircraft was well-recognised. The years 1914–1918 saw the development of a wide range of aircraft for increasingly specialised purposes, from reconnaissance to bombing, on both sides.

Arguably the most successful British fighter plane used during the First World War was the Sopwith Camel, built by the Sopwith Aviation Company and launched in 1916. It was a single seat bi-plane with a single rotary engine and twin synchronised machine guns, and took its name from the hump over the breeches of the guns. It was a difficult aircraft to fly but could be very effective in the right hands. It was ideal for daylight combat, but was also used for



Image: A Sopwith Camel F1. © IWM (Q 63822).

Image above: From an advert by the Aircraft Supplies Co. Ltd. for wicker seats, AGS 264. Courtesy of John S. Shaw.

night fighting and ground attack. 5490 Camels were built in the last two years of the war, and demand for these planes was so high that Sopwith had to contract their production to other companies such as Ruston Procter, Portholme, Boulton and Paul, Hooper, and Clayton and Shuttleworth.<sup>1</sup> In total, Great Britain produced over 58,000 aircraft during the war, each requiring either one or two seats.<sup>2</sup>

The earliest aircraft seats were made of wood, but by 1912 more lightweight seats of wicker or cane woven around a rattan or metal frame were introduced. Early aircraft were extremely flimsy and it was essential to save weight wherever possible to prevent the plane breaking up in flight. Baskets were well-suited to the purpose, being both light and strong. With the exception of a replica Sopwith Camel seat in the RAF Museum in Hendon which is made of willow, and a French Farman F20 Aircraft in the RAF Museum in Stafford with a metal frame, nearly all extant examples of First World War seats examined have a steam-bent rattan frame with cane stakes and weavers.

Of the baskets examined, the stakes on the seat and back are usually doubled. Some seats had solid weaving starting with an upset, then randing, and finishing with a four-rod wale at the top. Others start with an upset, and then have 3 inches of openwork and fitting in the back of the seat. Some seats had handholds while others did not. Some, such as those for the Sopwith Snipe, in which the pilot was positioned directly above the fuel tank, have a round hole



Image: A replica of a First World War Sopwith Camel aeroplane built by John Shaw, with a basketwork seat visible in the cockpit. To save weight, aircraft had openwork wooden frames with linen stretched over them. Courtesy of John S. Shaw.

in the base of the seat for the tank. Each seat had its own loose upholstered cushion held in place by a strap. The tops of the seats were covered in leather, stuffed with either horsehair or kapok, and secured to the frame on the outside with half-inch diameter upholstered buttons; the depth of this top covering varies in size.

By 1916 the Royal Flying Corps (the pre-cursor to the Royal Air Force) was using a standard design of aeroplane seat by the Aircraft Supplies Co. Ltd. (AGS 264). It seems that Aircraft Supplies was sourcing seats from a number of small firms and individuals, rather than manufacturing the seats themselves or through large contracts. This may explain why the seats are not mentioned in the sections of the *History of the Ministry Munitions* (1922) which deal with aircraft manufacture and aircraft general supplies.<sup>3</sup>

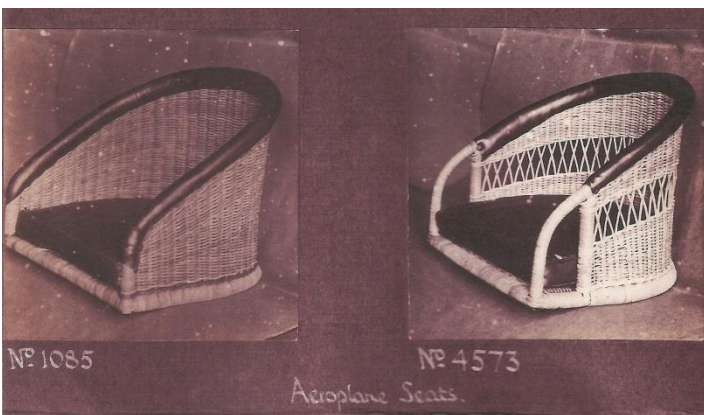


Image: Aeroplane seats, Dryad Cane Furniture catalogue N30. © dryadcanefurniture.com.

However, the aeroplane seats are mentioned in the 1915 *Basket, Skip and Hamper Makers' Federation List of Sizes and Prices for Government Work throughout the London District*. This list includes a section on War Office work,

indicating that many of the baskets made for the military effort were made to a standard design – and that there were numerous basketmakers involved in their manufacture. This list includes three basic designs of seat, with variations for passengers and pilots. It gives details of the sizes of the seats, the number of stakes, a description of the different styles, and the cost, which varies from 5 shillings and 2 pence to 8 shillings and 2 pence.<sup>4</sup>

Hand Basket, Hospital, Oval, Light Randed.									
L.B.		L.T.		W.B.		W.T.		D.	
14½		20½		9½		14½		8½	
		3		3		32		1 7	
Open at									
Price									
s. d.									
1 7									
Eight slath rods. Three rounds of upsetting. Two rounds of waling under border. Cane cross handle.									
Aeroplane Seats.									
PASSENGER. Pulp Cane.					Pulp Cane.				
W. of Seat.		D. of Seat.		D. of Back.		D. of Arms.		Price.	
18½		14½		18		4½		s. d.	
								8 2	
Stakes in seat, 17 doubled. Stakes in back, 39 doubled. Bow lapped across front and back of seat. Stakes kinked and lapped between two bows round the border with split cane. One round of four-rod upsetting, and one round of four-rod waling at top. Short iron screwed to seat to come up the arms. Three-rod wale front and back of seat.									
PILOT. Pulp Cane.									
Particulars as Passenger above, but 14 inches deep. Price 7/8.									
PASSENGER. Pulp Cane.					Fitch in back, 3½ inches.				
Seat.		D. of Seat.		D. of Back.		D. of Arms.		Price.	
18½		14½		18		4½		s. d.	
								6 3	
								6 8½	
Stakes in seat, 13 doubled; in back, 32 doubled.									
PILOT. Pulp Cane. Fitch in back, 3 inches.									
Particulars as Passenger with fitch, but 14 inches deep. Price with hand holes, 5/10½. Price without hand holes, 6/3.									
SCOUT. Pulp Cane. Fitch in back, 2 inches.									
Particulars as Passenger with fitch, but 9½ inches deep. Price with hand holes, 4/10½. Price without hand holes, 5/2.									
SCOUT. Special. Pulp Cane. Fitch in back, 2½ inches.									
W. of Seat.		D. of Seat.		D. of Back.		Stakes in Seat.		Stakes in back.	
15		12		9½		11		32	
Price with hand holes, 5/3½. Price without hand holes, 5/8.									
PASSENGER. Buff, Randed.									
Size as Passenger, Pulp Cane. Stakes in seat, 15 double. Stakes in back, 35 double. Price 7/10.									
PILOT. Buff, Randed.									
Size as Pilot, Pulp Cane. Stakes in seat, 15 double. Stakes in back, 35 double. Price 7/3.									
BALLOON CARS.									
Owing to the difficulty of giving complete details of Balloon Cars, time rate has been agreed to by the Employers' Associations, February 28th, 1916, at 1/- per hour.									
Admiralty Duplicate Pattern Knife Basket, Light Randed.									
L.		W.		D.		B.S.		Price.	
16½		10½		4		6		s. d.	
								14 9	
								3 5	
Three rounds of upsetting. One round of waling under border. Corner sticks. Footed, one round of waling on foot. Skin lapped handle, with three bows and two leaders. Two long partitions and one short partition with three sticks to each, to be secured with band and peg at ends.									

Image: The 1915 'Basket, Skip and Hamper Makers' Federation List of Sizes and Prices for Government Work throughout the London District.', pp.51–52.

Known basket makers include Dryad Cane Works of Leicester (which continued to make basketwork aeroplane seats after the war for commercial aircraft) and Edward Bowser of Park Lane, Leeds, whose advert in the 23 May 1917 edition of the *Aeroplane Magazine* describes the seats<sup>5</sup>:

*They are cheaper than wood, and are acknowledged to be the strongest and most comfortable Seat made.*

### Balloon baskets

Balloons were used extensively by both sides during the First World War. They were first used for military purposes during the French Revolution, and were first deployed by the British Army's Royal Engineers during expeditions to Bechuanaland in 1884, Suakin in 1885 and in the Boer War 1899–1902.

At the start of the war, the British were still using the spherical observation balloon but this was quickly replaced by the 'kite' balloon, an elongated balloon with stabilising fins. These were more aerodynamically shaped and could operate in more extreme weather conditions. The German design was the Parseval-Siegsfeld type balloon and the French design was the Caquot type, which was used by the Allies in the mid-latter part of the war.





Image: A caquot kite balloon ready to ascend, 1918. © IWM (Q11901).

The balloons consisted of a fabric envelope filled with hydrogen gas – the flammable nature of which led to the destruction of hundreds of balloons on both sides – from which was suspended a wickerwork balloon basket. The balloons were tethered to the ground by a steel cable, and communicated with the ground via telephone landlines.<sup>6</sup>

Positioning artillery observers on balloons a few miles behind the front lines at an altitude of around 1000–1500 metres allowed them to see targets at a greater range than they could on the ground. Towards the end of the war they were also used at sea for anti-submarine purposes, enabling the pilot to notify the ship of the U-boat's evasive actions during a depth charge attack.



Image: Aeroplane seats, Dryad Cane Furniture catalogue N31. © dryadcanefurniture.com.

The balloon baskets would have been made by basketmakers using either willow or cane. It has been

almost impossible to find evidence of companies making balloon baskets, although they do feature in the Dryad Catalogue. They also feature in the 1915 *Basket, Skip and Hamper Makers' Federation List of Sizes and Prices for Government Work throughout the London District*, with the following proviso<sup>7</sup>:

*BALLON CARS. // Owing to the difficulty of giving complete details of Ballon Cars, time rate has been agreed by the Employers' Associations, February 28<sup>th</sup>, 1916 at 1/- per hour.*

This implies that balloon baskets were either very complicated and too detailed to list, or that the designs varied from basket to basket, or both.

### Collections

- Stow Maries Great War Air Museum, Maldon, Essex: Has many replica aircraft used in the film industry, including a replica Sopwith Camel airframe.
- Royal Air Force Museum, Hendon: Has original and replica First World War aircraft, including an original Sopwith Camel probably built by Boulton and Paul of Norwich, with a replica willow seat. The museum also has two examples of kite balloon baskets on display.
- Royal Air Force Museum Reserve Collection, Stafford: Has fourteen original First World War aeroplane seats, which are available to view by appointment only.

### References

- <sup>1</sup> Shaw, J. (2013). On the Camel Trail. *Aero Magazine*, (214).
- <sup>2</sup> The Aerodrome. (2017). *The Aircraft of World War I*. [Online] <http://www.theaerodrome.com/aircraft/statistics.php>
- <sup>3</sup> Ministry of Munitions, Great Britain. (1922). *History of the Ministry of Munitions*.
- <sup>4</sup> Basket, Skip and Hamper Makers' Federation. (1915). *List of Sizes and Prices for Government Work throughout the London District.*, pp.51–52.
- <sup>5</sup> *Aeroplane Magazine*, 23 May 1917.
- <sup>6</sup> Jefford, J. (2015). 'Near to God': Kite balloons, Artillery Observation and the Royal Flying Corps. In: R. Mahoney, ed., *First World War in the Air*. London: Royal Air Force Museum London, pp.45–50.
- <sup>7</sup> Basket, Skip and Hamper Makers' Federation. (1915). *List of Sizes and Prices for Government Work throughout the London District.*, p.52.