

TECHNOLOGICAL PRACTICE CASE STUDY

MAY 2007

SOFT MATERIALS TECHNOLOGY

YEARS: 7-10; 11-13



**AIR NZ/ZAMBESI**

When Air New Zealand commissioned Zambesi to design new staff uniforms as part of its brand refreshment programme, designer Elizabeth Findlay's brief was that the garments should express the airline's nationality.

**FOCUS POINTS INCLUDE:**

**Brief Development:**

- incorporating cultural influences
- Pitching for the commission
- Refining a brief

**Technological Modelling:**

- Producing prototypes
- Usability testing

**Technological Products:**

- Properties of materials
- Feedback on suitability of materials used

**Outcome Development and Evaluation:**

- Changing materials and modifying designs
- Adding extra garments to the range

**ADDITIONAL SUPPORT MATERIAL**

- [tvnz.co.nz/national-news/photogallery-new-air-zealand-uniforms-3326779](http://tvnz.co.nz/national-news/photogallery-new-air-zealand-uniforms-3326779)
- [www.stuff.co.nz/business/3216871/Air-New-Zealand-reveals-new-Barbie-uniform](http://www.stuff.co.nz/business/3216871/Air-New-Zealand-reveals-new-Barbie-uniform)
- [www.nzherald.co.nz/nz/news/image.cfm?c\\_id=1&gal\\_objectid=10619252&gallery\\_id=108796#6801411](http://www.nzherald.co.nz/nz/news/image.cfm?c_id=1&gal_objectid=10619252&gallery_id=108796#6801411)

# AIR NZ/ZAMBESI

At one minute past midnight on March 27, 2006, more than 5,000 Air New Zealand staff in airports and airline offices around the world began to take their clothes off. 180 crew aboard 13 flights did the same thing. In a 24-hour synchronised operation, all of the airline's staff changed into new uniforms – the much-anticipated result of an extensive two-year collaboration between the airline and Auckland fashion house Zambesi.

In 2001, the world airline industry was in turmoil. The rise of the budget airlines, changing consumer preferences and a downturn in the world travel industry was causing the traditional carriers a lot of pain. Air New Zealand was one of them.

Unable to compete on price, the airline decided to capitalise on its main competitive advantage and differentiate itself from the rest of the airlines crowding the skies of the world. The company's competitive advantage, management realised, and one that couldn't be copied or matched by any other operator, was that they weren't just selling tickets; as New Zealand's national carrier, they were acting as a gateway to one of the world's most desirable destinations.

If they could build a positive connection in the consumer's mind between the destination, and the airline, and have this positive connection translate into ticket sales, then they would be well on the way to securing a future for the business.

As a very visible part of the company's operations, the airline's uniforms were a key element in the brand refreshment programme. The 13-year-old Barbara Lee designs were comfortable, functional and out-of-date. They said a lot about the times they were designed for but they didn't say anything about New Zealand today. To replace them Air New Zealand hired Auckland fashion house Zambesi.

## Background

Founded in 1979 by husband and wife team Elisabeth and Neville Findlay, Zambesi is one of the four New Zealand labels – the so-called "New Zealand Four" – that showed at the 1999 London Fashion Week, and in so doing established New Zealand as a serious player on the international fashion stage. To put it simply, the company is blueblood New Zealand fashion aristocracy.

In accepting the commission, Zambesi was setting off down a well-trodden path. While it's true that "Fashion borrows from uniforms, and uniforms borrow from fashion, but designers of fashion rarely design uniforms" (as John Seabrook put it in the New Yorker), there are exceptions, and for good historic reasons, the airline industry is one of them. Almost as soon as the first air hostesses (later flight Attendants) left the ground in 1930, their job became associated with style and glamour. In the 1930s and 40s attendants usually wore military-inspired outfits. In the 1950s and 60s, their uniforms mirrored the high fashion of the time – decorative hats and tailored suits. By the 1960s and 1970s, renowned fashion designers were designing directly for the airline industry: Dior designed uniforms for SAS, Balenciaga for Air France, and Valentino and Ralph Lauren for TWA.

More recently, despite record-high fuel prices and the ruinous effects of savage competition, at least five international carriers (besides Air New Zealand) have given their flight attendants multi-million dollar designer makeovers. In 2003 Qantas unveiled its new outfits, designed by Peter Morrissey; in 2004 British Airways unveiled its new uniforms, created by Julien Macdonald, who lists Nicole Kidman and Elizabeth Hurley amongst his clientele. The following year Air France unveiled its first uniform makeover in 17 years, sticking with its tradition of collaborating with famous French fashion houses by hiring Christian Lacroix. (Air France had previously worked with Dior and Balenciaga.)

## Innovation

The commission was new ground for Zambesi; the first time it had been involved in creating a corporate uniform. To secure the commission, Zambesi had to pitch for the job along with five other design houses. Elizabeth Findlay and her team worked up a series of sketches of how they saw the uniforms. To make their pitch, these sketches of male and female figures were drawn into groups of crew, ground staff and management.

Elizabeth Findlay says the presentation was “pretty much our idea of how the design should appear. We were just showing off what we thought would be right.”

Uniforms are primarily concerned more with comfort and maintenance than glamour and display. While this is true enough, a uniform is far more than simply clothing worn at work. A uniform identifies its wearer with an organisation and conveys an image about that organisation. A uniform can make people feel proud of their work and foster esprit de corps. Uniforms also convey messages.

Air New Zealand management wanted the new uniforms to say ‘New Zealand’ to their customers and potential customers. They wanted the uniforms to reflect New Zealander’s strong pride, sense of place and attachment to their country. They wanted the uniforms to convey the notions of green tranquility and restfulness. And they wanted this message conveyed with style, flair and clarity. It went without saying they also wanted cost-effective comfort, durability and ease-of-maintenance.

Computers have changed fashion design and will transform it further. But until they are programmed for creativity, art, magic, inspiration and serendipity, computers will never come within a stone’s throw of ‘doing fashion’, much less convey the sort of messages Air New Zealand management had in mind. While computers and other technologies can help turn ideas into “things”, they can’t in themselves give us those ideas; or manage the conversion of ideas into objects for that matter.

Fashion design is a complex and subtle process that will always be closer to art than to science. Many of the early stages of the process may occur unconsciously. All design is bound by culture and informed by visual memory. Ideas, details, historical and cultural references and memories all combine in the designers mind to narrow the range of design options available as a starting point.



Because designers nearly always devise new combinations of familiar elements to accomplish novel results, links to known elements are inevitably present. But the inevitability of the old in the new is no check to originality. Part of the visual memory and culture tapped by the Zambesi designers referred to the gloriously stylish days of air travel, when airlines such as TEAL, BOAC and Continental ruled supreme.

Elizabeth Findlay grew up in Dunedin and remembers air hostesses turning heads on Princes Street, so exotic and glamorous were they considered. Elizabeth wanted to recapture some of this glamour. In her initial sketches, she started with the silhouettes of the outfits.

“I just sat down and thought about how I would like the silhouette for the female crew to be. Why start with silhouette? Because I wanted the females to look like females a little bit more. More glamorous I guess. But not in a Hollywood sort of a way, a little bit more feminine, not so corporate. I didn’t want them to look like they worked in a bank.”

## Design

In theory, the dual constraints of economy and practicality could confine uniform designers to parameters so narrow they aren’t left with too much room for aesthetic maneuvering. Elisabeth says she felt no such constraints with the Air New Zealand commission. Any constraints that did exist were implicit in the nature of the job and weren’t imposed by the airline company, she says. Elisabeth embraced certain features of the national airline’s culture and history as givens, as must-have metaphors for the airline’s (and by association the country’s) history; most notably the beloved Koru. “Things that we thought shouldn’t change.”

It’s obvious that Elisabeth approached the commission with a sense of pride and saw it as an opportunity to express, through her craft, her feelings of what it means to be a Kiwi. “It was Air New Zealand. It’s an icon. We had a sense of ownership, which is probably shared by the rest of the country.”

Like any other art-form, fashion can say a lot about time and place and history. And like any poet, painter or songwriter, Elisabeth Findlay’s challenge was to translate these feelings into real objects. That’s the craft of it. Her creative vision, as expressed in the pitch Zambesi made to the airline, obviously struck a chord with Air New Zealand management. (Elisabeth says she later presented the airline with an alternative design for a skirt which was declined.)

The whole discipline of making the presentation, of presenting her ideas and philosophies was “quite an amazing experience”, Elisabeth says.

“Unless you are given the opportunity to do that you are busy working and not talking a lot. Sometimes analysing why you are doing something or why you want to do something helps you understand what is at the heart of what you do.”

After being awarded the commission, Elisabeth and her team began to focus on refining their ideas and figuring out a way to translate them into a very functional set of working clothes. Elisabeth and assistant Tulia Wilson spent a lot of time at the back of airports, behind desks, and on planes working out exactly what was required. The staff they questioned all had firm ideas and opinions – some wanted to look sexy and some just wanted plenty of pockets. The airline organised three workshops, attended by hundreds of staff from all areas of the business to gauge views; these were followed by online surveys involving thousands of staff. The consultative process is one designers ignore

at their peril. Air Canada had a class-action taken out against it by disgruntled staff members who claimed they hadn't been sufficiently consulted before being presented with a new set of uniforms.

The skirt design was changed. Not as a result of any input from airline staff but because Elisabeth came to realize that the original design would very difficult to alter. "It needed to be easier. They (Airline staff) might want to get it shortened or let out by a tailor. There were a few too many seams and panels."

One of the things Air New Zealand wanted the new uniforms to express was nationality. National dress is the obvious way to go about this; Singapore Airlines achieves this very well with its "Singapore Girl" sarongs. But a flax skirt is no sarong and Zambesi had to look at other, more subtle, mechanisms to convey the idea. Colour being one, cut being another.

The soft lines of the uniforms' cut and their muted schist, greenstone and teal tones were chosen to reflect New Zealand's quiet natural places. The detailing on the clothes was designed to tell a story. Created by Maori ta moko (traditional tattoo) artist Derek Lardelli, the detailing makes heavy use of patterns from traditional harakeke raranga (flax weaving).

The whatu, or diamond shape, is a touchstone symbol meaning centre or core in Maori culture. The Koru, a national symbol of beginnings, nurture, growth, and regeneration, is there; implicit in its combination of straight lines and soft curves is the idea of movement and travel.

From the outset, Elisabeth was keen to use fine merino fabric in part of the new range – not only because of its fineness and functionality – wool is naturally flame-resistant, breathable and comfortable in a range of climates – but for its iconic value.

"We wanted that truly New Zealand imagery the material conjures up."

A 95% wool and 5% lycra blend was used for suiting material. (This was subsequently changed to a pure wool, a move which improved the washability, wearability and crease-resistance of parts of the range.)

## Development

Zambesi worked with specialist knitwear manufacturer Optimum Clothing to develop the wrap/shawl worn by female staff. Elisabeth wanted the Derek Lardelli motifs on the front of the men's shirts to appear on the edge of the shawl; Optimum Clothing helped find a way to do this.

Zambesi's commission was to design the uniform range and produce "master patterns" for all the pieces, which could be sent for grading and marking and production. Grading produces a range of patterns of different sizes; marking determines the most efficient way to cut the pattern pieces from a roll of fabric. Wellington manufacturer Booker Spalder was contracted by Air New Zealand to perform the grading and marking and produce some prototypes, which Zambesi reviewed.

As the designs evolved they were tested on staff. Usability testing has long been established in other areas of industrial design: no car manufacturer would think about sending a new model to the production line without extensive consumer testing of prototypes. Parts of movies are similarly tested on sample audiences before their general release. Zambesi had some Air New Zealand staff wear prototypes (made up in colours other than those used in the range proper) to assess the functionality of the designs.

One of the biggest challenges of the project was designing for the unexpectedly wide range of body sizes and shapes at the airline, Elisabeth says. "I guess I hadn't realized how broad the size range was of the staff. I just thought in terms of an average woman. If you were doing corporate clothing all the time you would be much more aware of it. You have to start thinking about, well OK, this is going to look great on a size 10 but what's it going to look like on a broader woman? It's very very difficult to design one shape that will suit everyone; it's just impossible, so you try and think within a broader spectrum."

## The Launch

In all, the new range consists of 20 mix-and-match pieces. This range allows staff to dress to suit their body shape and to suit prevailing conditions. Airline staff work in different time zones, climates, hemispheres and seasons. The uniform includes a lightweight, belted shirt-dress and sculptured jacket for women and, for men, merino straight-legged trousers teamed with a long-sleeve shirt, optional tie and a black belt with paua shell buckle insert. Air crew of both sexes get to wear a high-collared, schist grey overcoat with optional padded lining for cold weather. The uniforms were launched to at the 2005 Auckland Fashion Week.

While this was the first, much anticipated public showing of the new uniforms, Elisabeth says the process of acceptances and approvals meant plenty of people within the airline had seen the uniforms beforehand. "It's not like we pulled it out of a bag and said 'Wear it'." However, the colours of the new uniform were kept strictly under wraps until fashion week.

The October launch marked the end of one phase in the uniform development project; but rather than being a finished, immutable product, the uniform is a work-in-progress, Elisabeth says, and will be refined during its life. "It will look the same but work better."

By March 2006, all Air New Zealand staff had been issued with their new uniforms; a survey six months later revealed problems with the fine merino fabric used in the range. Staff complained about the fabric's tendency to crease and the difficulty of removing food stains from the uniforms used by in-flight staff. As a result, Zambesi changed the suiting, replacing it with pure wool material. Other modifications resulting from survey feedback include a more relaxed fit for the trousers worn by male staff and the addition of lightweight shirts and some additions to the range of knitwear and scarves in the range.