# Building ‘human factors’ into flying training at RAF Cranwell

## Background

The Royal Air Force (RAF) is an internationally respected organisation with a proud history and a commitment to ongoing excellence. Maintaining this requires a focus on continuous improvement, and sustaining within the culture a keen awareness of the responsibility the Force bears. Underpinning the reputation of the organisation, of course, are thousands of individuals in a variety of demanding and complex jobs.

A critical step in the organisation’s evolution was acknowledging that it is not just technical resources and expertise that make it great, but the way in which individuals process data and operate together in functional teams. The RAF’s drive to develop its inter- and intrapersonal skills training for new aircrew recruits over the last eight years arose from this, and focuses on how trainees perform in relation to cognitive and interpersonal as well as mechanical challenges.

Squadron Leader Adrian Rycroft from the Central Flying School (CFS) at RAF Cranwell is responsible for developing airmanship and human performance training within the British military flying training system. He explains: “Experience in the field demonstrates the importance of the *human* interface – particularly where stress, situational awareness and decision-making are concerned. So when it comes to training pilots, we must accelerate trainee learning on the motor and cognitive levels, and use the best targeted and most effective methods of instruction.”

In common with many businesses, whilst HR practitioners were aware of the importance of ‘human factors’ in developing the key talent of the future (in the RAF’s case, pilots), the training at that time had no reliable, consistent and focused way of addressing this need. Having diagnosed their requirements, the RAF needed a framework for enhancing the ‘cognitive and interpersonal skills’ component of their flying training.

## Solution

Following a major internal study in 2000 identifying the need for the teaching of cognitive skills, the RAF developed a definition of ‘airmanship’ and a revised programme of continuous assessment for trainees. As part of this process, they realised the contribution that a structured approach to personality and learning styles could make in looking at how different individuals respond to the flying situation. Adrian elaborates: “We wanted a framework that had resonance for trainees, to avoid the ‘So what?’ factor – something that had a real impact in the military context. The training needed to seem relevant and the framework to be embedded into the whole structure of the flying training programme.”

Adrian says: “We were aware that the old system of ‘Explain, Demonstrate, Criticise Mistakes then Repeat’ was not effective in producing consistently high performance. We saw that this teaching style does not suit everyone and for some, creates stress in itself over time, rather than building confidence.”

In selecting a personality tool, the CFS opted for the MBTI® instrument over its competitors, for two reasons. They were attracted to its pedigree – a 50-year track record of well documented research and application – and to its versatility and flexibility – the different levels of depth that can be achieved when using it, and its applicability in multiple contexts.

As European custodians of the MBTI instrument for more than 20 years, OPP® were expertly equipped to work with the RAF to design their training programme around the tool, and to carry out a validation study demonstrating how it was applicable in their situation.

Adrian comments: "OPP provided the right balance between listening to our needs and facilitating us in actually confirming what it was we were looking to get out of our use of the MBTI instrument. They went above and beyond in order to understand where we were coming from and pass on their knowledge and expertise to the RAF instructors."

This helped convince the CFS of the MBTI instrument's applicability and relevance to the flying training – so much so, that with the help of OPP's consultants they went on to structure the whole training programme around the MBTI framework.

## Structure of the training

The Flying School's 'Airmanship and Human Factors' training programme is covered by two courses: one for initial aircrew students and one for aircrew instructors who are just beginning their professional training. The courses are similar, but have different emphases, covering MBTI 'best fit', plus ensuring an understanding of how MBTI preferences affect communication, data processing and stress reactions. The courses are delivered by instructors who are qualified MBTI Step I practitioners and have completed the 'MBTI for Aviation' course that was developed jointly by OPP and the Human Factors Centre in 2007.

In addition, a new component has more recently been added to respond to demand for more extensive use of the MBTI instrument within RAF Cranwell, known as 'Aircrew Performance Coaching' (discussed in more detail below). Participants taking this component follow an intensive programme of learning:

- Week One: Attend a public MBTI Step I Qualifying Programme Part One
- Week Two: Complete the MBTI Qualifying by attending an in-house Part Two
- Week Three: Complete an in-house MBTI and coaching course, followed by an in-house Step II Qualifying Programme
- Week Four: Pass a coaching assessment day, followed by practical exercises combining the MBTI knowledge with CBT and sports psychology.

The whole programme can be completed in four weeks by a cohort of seven people, running twice a year. The benefit of having the in-house components delivered by OPP is that OPP's consultants can tailor the training to the RAF's needs, using examples and data relevant to the trainees.

## 'Different in a good way'

In developing the Airmanship and Human Factors training, the MBTI philosophy around the constructive use of differences was key. It helped the RAF nurture a genuinely supportive and productive environment, where difficulties were acknowledged, but in parallel, strategies for resolving them were taught that allowed everyone to progress.

As Adrian explains, “The MBTI tool provides various communication and problem-solving models with many practical applications for the RAF, including situational awareness, decision-making and mental performance. It is particularly helpful in encouraging students to think about the different communication styles that they and the people they interact with employ.”

This focus on communication styles was extended to the instructors training the courses, who received their own facilitation skills training based on the MBTI framework. According to Adrian, “Everyone feels they can apply the MBTI tool, especially flying instructors; it equips them with the means to transfer their knowledge effectively, whoever their audience.”

As mentioned above, there was such a strong uptake of the MBTI framework that extra components were added to the programme since its inception: “People took it on board quickly, and wanted to know what was next.” So OPP and the CFS created a new training module, Aircrew Performance Coaching, offering individual coaching to trainees who wanted it, including field coaching assessments. Adrian and his colleagues have embedded their own purpose-built coaching programme, producing a unique package for promoting inter- and intrapersonal awareness that refers constantly back to the MBTI framework.

Feedback on the coaching element has been very positive: “People have only good things to say about it!” says Adrian. “Some students have told us that if it hadn’t been for this, they would have failed… Drop-out rates at a late stage in the training could cost the RAF up to £2.5 million per student, and this is helping everyone to get 100% out of the training and the money invested in it.”

The newly introduced coaching element has been such a success that RAF Cranwell have decided to apply for accreditation from the European Mentoring and Coaching Council (EMCC), further cementing the credibility and long-term application of their work with OPP.

## Dealing with stress

Illustrating the versatility of the MBTI instrument, the RAF also use it in conjunction with physical tests of competence, such as a high-ropes course. Instructors use the shrewd insights the instrument offers into stress behaviour to understand and address how people cope with anxiety in dangerous and stressful situations. They are then able to give aircrew increased awareness and coping strategies that really work, ensuring they continue to be an asset to their team even when under pressure.

This includes using type dynamics to pull oneself out of ‘the grip’, a stress reaction where a person’s ‘hidden personality’ is unleashed, to sometimes debilitating effect. Alongside this, the RAF’s instructors use the MBTI Step II instrument, providing trainees with concrete strategies that help them overcome high-stress situations, and gradually build resilience.

Equally, for instructors a knowledge of MBTI preferences has given them an awareness of how to adapt their communication style. Adrian elaborates: “Instructors with a preference for Extraversion tend to chat away whilst in the air, not realising that for a student with an Introversion preference, this talking is an added distraction that could impede their learning early on in the process! We’ve learnt to adapt our communication style so as to get the most out of our trainees in the initial stages of instruction.”

## Benefits for the organisation

For the RAF, the MBTI instrument has acted as the catalyst that linked their anecdotal analysis of potential development areas to their desire for exceptional results. The framework it provides has enabled the RAF to help aircrew recognise that high mutual trust, based on an understanding of oneself and of differences in others, allows instructors to get the best out of their students – and ensures that the students fulfil their potential.

As a result, the RAF has seen a sustained increase in performance. Every sortie is marked on the quality of the cognitive skills used, and all instructors report seeing significant improvements due to the increased awareness of themselves and their students.

The success of this initiative is also reflected in comments from trainees and instructors on evaluation forms: “Feedback has been universally positive. When asked if they are left feeling they can use their learning in their live working environment, the answer is ‘yes’; individuals use their training in many of the areas identified as important from the start, and on a day-to-day basis. Throughout the air force people are asking for the same tools to be introduced”, says Adrian. “People are gaining not just the technical skills required to fly planes, but true skills for life, so we see the MBTI instrument in our context as a real end-to-end framework that can be applied in a large number of different and productive areas.”

The ongoing embedding of the MBTI instrument across such a variety of contexts is testimony to the credibility and flexibility of the instrument, and the confidence it inspires in practitioners as a staple of development programmes of all kinds.

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