# **INSPECTION REPORT**

# **Marshall Group Training Centre**

25 February 2002



## Grading

Inspectors use a seven-point scale to summarise their judgements about the quality of learning sessions. The descriptors for the seven grades are:

- grade 1 excellent
- grade 2 very good
- grade 3 good
- grade 4 satisfactory
- grade 5 unsatisfactory
- grade 6 poor
- grade 7 very poor.

Inspectors use a five-point scale to summarise their judgements about the quality of provision in occupational/curriculum areas and in New Deal options. The same scale is used to describe the quality of leadership and management, which includes quality assurance and equality of opportunity. The descriptors for the five grades are:

- grade 1 outstanding
- grade 2 good
- grade 3 satisfactory
- grade 4 unsatisfactory
- grade 5 very weak.

The two grading scales relate to each other as follows:

SEVEN-POINT SCALE	FIVE-POINT SCALE
grade 1	grade 1
grade 2	grade i
grade 3	grade 2
grade 4	grade 3
grade 5	grade 4
grade 6	grade 5
grade 7	graue 5

## **Adult Learning Inspectorate**

The Adult Learning Inspectorate (ALI) was established under the provisions of the *Learning and Skills Act 2000* to bring the inspection of all aspects of adult learning and work-based training within the remit of a single inspectorate. The ALI is responsible for inspecting a wide range of government-funded learning, including:

- work-based training for all people over 16
- provision in further education colleges for people aged 19 and over
- the University for Industry's **learndirect** provision
- · adult and community learning
- training given by the Employment Service under the New Deals.

Inspections are carried out in accordance with the *Common Inspection Framework* by teams of full-time inspectors and part-time associate inspectors who have knowledge of, and experience in, the work which they inspect. All providers are invited to nominate a senior member of their staff to participate in the inspection as a team member.

## Inadequate provision

A provider's provision will normally be deemed to be less than adequate where

- one third or more of published grades for occupational/curriculum areas and New Deal options are judged less than satisfactory, or
- leadership and management are judged to be less than satisfactory

The final decision as to whether the provision is inadequate rests with the Chief Inspector of Adult Learning. The overall judgement as to whether the provision is adequate or inadequate is included in the summary section of the inspection report.

#### **SUMMARY**

## The provider

Marshall Group Training Centre is part of Marshall of Cambridge Aerospace Limited and is based at Cambridge Airport. It provides training in aerospace engineering and component production, including airframe fitting and electrical avionics, and in manufacturing trades at craft and technician level to learners employed by the company. The company currently employs 54 advanced modern apprentices.

# Overall judgement

The quality of training is adequate to meet the reasonable needs of those receiving it. More specifically, the work-based learning for young people and the leadership and management are good.

#### **GRADES**

Leadership and management	2
Contributory grades:	
Equality of opportunity	1
Quality assurance	3

Engineering, technology & manufacturing	2
Contributory grades:	
Work-based learning for young people	2

## **KEY STRENGTHS**

• effective implementation of equal opportunities policies and procedures

1

- good promotion of equal opportunities
- · effective quality assurance system
- good on-the-job training
- effective learner support

#### **KEY WEAKNESSES**

• insufficient monitoring of training and assessment

# OTHER IMPROVEMENTS NEEDED

- more effective use of learners' experience in the self-assessment report
- better use of learners' existing knowledge and qualifications in planning training

## THE INSPECTION

1. A team of three inspectors spent a total of 12 days at Marshall Group Training Centre during February 2002. They interviewed 30 learners, conducted 12 interviews with staff and visited the two colleges subcontracted to provide the off-the-job training where a further six staff were interviewed. One training session was observed. Inspectors examined a range of written material including learners' portfolios of evidence and records, the company's plans, policies and procedures, and the reports of awarding bodies. The inspectors also studied the self-assessment report, which was produced in July 2001.

## Grades awarded to learning sessions

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Total
Engineering, technology & manufacturing	0	0	1	0	0	0	0	1
Total	0	0	1	0	0	0	0	1

#### THE PROVIDER AS A WHOLE

#### Context

- 2. The Marshall Group Training Centre (the Training Centre) is part of Marshall of Cambridge Aerospace Limited, a privately owned company located in Cambridge. The company is part of a larger group of Marshall companies. The group employs 3,500 people in various occupational areas, including aerospace engineering, specialist vehicle design and manufacture, motor vehicle sales and after-sales support, refrigerated transport sales and service, and airport property ownership and management. The original company was formed in 1909 and began training its first motor vehicle apprentices in 1920. The Training Centre was opened on its present site in 1965 and currently employs four full-time members of staff. There are 54 advanced modern apprentices working towards national vocational qualifications (NVQs) in aerospace engineering. Additional training is subcontracted to two local colleges of further education. The training programme is funded through a contract with the Cambridgeshire Learning and Skills Council (LSC).
- 3. The Training Centre recruits from a wide area with 51 per cent of the learners living within Cambridge. In September 2001, the unemployment rate in Cambridgeshire was 1.6 per cent, compared with the national average rate of 2.9 per cent. The proportion of people in the local population from minority ethnic groups is 3.6 per cent, compared with the national average of 6.2 per cent. In 2000, the proportion of school leavers in Cambridgeshire achieving five or more general certificates of secondary education (GCSEs) at grade C or above was 51 per cent, compared with the national average of 47.9 per cent.

#### Work-based learning for young people

- 4. There is good initial off-the-job training. Learners are equipped with relevant basic skills before starting their work placement. On-the-job training is effective and learners gain good experience of relevant aspects of work relevant to their NVQ. There is effective learner support. Learners demonstrate good levels of skill and knowledge. Learners are encouraged to take responsibility for their own learning programmes.
- 5. Retention and achievement rates are declining. The percentage of learners leaving the training programme early without achieving the framework increased from 21 per cent in 1994-95 to 46 per cent in 1997-98. The achievement rate for learners who started their training programme in 1994-95 was excellent at 92 per cent but dropped to 54 per cent by 1997-98. Strategies are now in place to rectify this, including clear guidance at career events and school visits and providing work tasters.

#### LEADERSHIP AND MANAGEMENT

Grade 2

6. The group training manager is responsible for the overall management of the Training Centre. He reports to the personnel director of Marshall of Cambridge Aerospace Limited (Marshall Aerospace). Marshall Aerospace provides strategic direction by identifying the number of learners needed for the future of the business. The Training Centre has three other full-time staff, an administration secretary who is responsible for quality assurance, and two instructors who train and assess learners during their initial training. The group quality assurance manager of Marshall Aerospace is the independent auditor for the Training Centre. Four other members of staff in Marshal Aerospace act as work-based assessors and nine others are working towards assessor qualifications. Internal verification is subcontracted to a local college and an independent verifier. The Training Centre has a quality assurance system, procedures manual and work instruction documents that are internally and externally audited to meet an international quality assurance standard. The company has a clear and detailed equal opportunities policy for staff and learners. Marshall Aerospace is accredited with the Investors in People standard, a national standard for improving an organisation's performance through its people. The self-assessment report was produced in May 1998 and updated in July 2001.

#### **STRENGTHS**

- open and clear management style
- · effective staff appraisal and development
- good internal and external communications
- clear commitment to equal opportunities
- effective implementation of equal opportunities policies and procedures
- effective quality assurance system

#### **WEAKNESSES**

insufficient monitoring of training and assessment

#### OTHER IMPROVEMENTS NEEDED

- better monitoring of learners' understanding of equal opportunities
- more effective use of learners' experience in the self-assessment report
- 7. The group training manager, through regular formal and informal meetings with staff and learners, has developed an open and clear management style in which roles and responsibilities are clearly defined. Training is well planned and managed, and learners understand their clear and measurable targets. The manager has extensive contacts with a number of external agencies, including the chairing of two aerospace NVQ revision working groups on behalf of a national training organisation. Good practice is shared

with members of staff at the Training Centre. Staff and learners are able to approach the manager to discuss issues both formally and informally. There are good working relationships among the staff.

- 8. Learners are given excellent support during work placements. They are placed with experienced operatives, under the supervision of department managers, committed to providing good training. Learners meet every 10 weeks with Training Centre staff to review progress and discuss work-based reports. They are able to challenge the review outcomes and comment on how they will maintain good performance or improve unsatisfactory performance. The process is open and fair and learners respond positively to their improvement needs. Many of the comments recorded are informative, but some lack detailed analysis of the learners' situation. Working relationships between staff and learners are good. Learners discuss problems with members of staff on a formal and informal basis.
- 9. There is effective staff appraisal and development. All staff have comprehensive and up-to-date job descriptions, which reflect the skills and experience needed to provide good training and individual learner support. Staff appraisals take place annually. Staff development needs are identified in order to maintain professional standards among staff, support future plans for the Training Centre and to ensure individual development of staff. A clear plan is drawn up detailing future staff training and qualifications, duration and timescale. Staff are encouraged, through subsidised course fees, to undertake vocational and non-vocational courses. Training staff are working towards, or have achieved, a wide range of appropriate in-house training qualifications, including assessor qualifications and short courses in abrasive wheel regulations, fire training and safety.
- 10. Internal and external communications are well managed and fully recorded. There are regular staff meetings in which clear information and guidance are given. During meetings, staff openly discuss issues with the group training manager and the quality assurance representative and influence planning decisions. The company subcontracts off-the-job training to two further education colleges. The Training Centre is used by one college for the registration, certification, and some assessment and verification of NVQs in aircraft installation and commissioning. The college also provides key skills training and assessment. The agreements covering these arrangements with subcontractors are good. There are regular meetings to review learners' progress. These meetings are well minuted and produce good action plans. Termly reports are provided and used to monitor learners' progress. The college maintains a detailed and thorough record of internal and external verification reports. There is good communication between the college and the training centre staff. Discussions are taking place on possible work placements for college lecturers, although no work placements have yet been undertaken.
- 11. The business plan for the Marshall Group of Companies is developed at senior management level. The group training manager uses this plan to develop strategies that are amended at annual management review. This review includes the quality assurance

system, training programme, staff appraisal, company budget information, the self-assessment report and the development plan. Resources in the Training Centre workshop are well managed and adequate for the basic skills training. There is good internal control for the management of finances. The personnel director of Marshall Aerospace monitors the Training Centre budget. The two local colleges subcontracted to provide further education have good aerospace resources and relevant equipment to provide effective links between theory and practical work.

# **Equality of opportunity**

## Contributory grade

- 12. Marshall Aerospace has a comprehensive equal opportunities policy and supporting procedures, which were updated in February 2001. The procedures include clear definitions of bullying, harassment and discriminatory practice. An equal opportunities committee, made up of employees from different parts of the company, reviews the policy and its implementation. The company also has a team of confidential advisers who provide support for employees experiencing difficulties or who need advice. The policy, an explanation of its purpose, the role of the equal opportunities committee, and the names and photographs of the confidential advisers have been widely circulated. Although these are featured in the company newsletter, a copy of which has been sent to all employees, they are not displayed on noticeboards in the manufacturing workshop of the company. Both subcontracted colleges have service level agreements and have their own equal opportunities policies and procedures. The college responsible for key skills training uses equal opportunities statistics from Marshall Aerospace for one of the key skills assignments. A comprehensive staff development programme on equal opportunities is being carried out. All staff are expected to attend a briefing session on the policy and associated procedures. Many staff, including all training staff, have already undertaken this. Learners receive a copy of the policy during their induction, when it is explained to them.
- 13. The Training Centre has an equal opportunities action plan, which is reviewed and updated annually. It sets out the aims of the Training Centre for the promotion of equal opportunities. Despite the wide promotion of the policy, many learners still have a poor awareness and understanding of broader equal opportunities issues.
- 14. Data on the gender and ethnicity of all applicants and learners are recorded. These data are analysed annually to show the proportion of applicants from each group and the proportion of those offered apprenticeships. The proportion of learners from minority ethnic groups is higher than the local population. Although women are traditionally under-represented in engineering, the company encourages women to join its training programmes through its recruitment activities.
- 15. The Training Centre has a complaints procedure. Complaints are recorded along with details about the investigation into the complaint and the actions taken. Complaints received from learners are reviewed as part of the Training Centre's review process.
- 16. Training rooms and workshops are situated on the ground floor and are accessible to people with restricted mobility. There are, however, no toilet facilities for people with disabilities in or near the Training Centre.

## Quality assurance

## Contributory grade 3

- 17. There is a well-established and comprehensive quality assurance system. The British Standards Institution, the local LSC and the internal auditor audit the quality system. Training Centre staff fully understand the quality assurance system and their relevant responsibilities and attend quarterly quality assurance review meetings. The meeting agendas comply with the procedures manual and detailed minutes are recorded. Staff contribute well to the review of quality assurance, and improvements are made as a result of their suggestions. Analysis of learner feedback, review of equal opportunities, and achievement data are discussed and used to develop action points. There is no indication of timescales for the completion of actions.
- 18. The Training Centre subcontracts off-the-job training to two local colleges. One college also provides key skills assessment and some internal verification. There are effective procedures to ensure that quality assurance issues are identified through internal and external verification reports and that corrective action is taken. Both colleges provide detailed termly reports on all learners. Records of internal and external verification are detailed and thorough, and indicate a consistent approach to the verification process.
- 19. There is insufficient monitoring of training and assessment. The internal verifier is not present during the assessment process and does not observe or monitor the assessments, but relies on examining portfolios of evidence and interviewing learners after the assessment. The training manager informally monitors the teaching and training in the Training Centre. This is not systematically recorded. There is no monitoring of the training given to learners on engineering training programmes on how to use machines in the manufacturing workshops following their basic engineering training.
- 20. All Training Centre staff contribute to the development and writing of the self-assessment report. Inspectors found some of the strengths in the report to be no more than normal practice. Some key strengths and weaknesses were not acknowledged in the report. The report did not include the views of learners or use them in creating the development plan. The development plan dealt only with rectifying weaknesses rather than also building on strengths. There has been no review or monitoring of the action points in the timescales set for their completion.

## **AREAS OF LEARNING**

# Engineering, technology & manufacturing

Grade 2

Programmes inspected	Number of learners	Contributory grade				
Work-based learning for young people	54	2				

21. There are 54 advanced modern apprentices on work-based learning programmes in engineering, technology and manufacturing. The apprenticeship usually lasts for four years. All learners are employed and are recruited as electrical avionics or airframe fitters at technician or craft level, or as manufacturing support learners. Learners work towards an NVQ at level 3 in engineering installation and commissioning, or in engineering production. All learners also carry out key skills training on a day-release basis at two subcontracted colleges of further education. All learners carry out a period of initial off-the-job training in basic engineering fabrication skills before entering the workplace. Additional vocational training is provided by the two subcontracting colleges relevant to learners' individual career aims, and to achieve additional qualifications. Learners are able to carry out further training on completion of their apprenticeship.

The following table shows the achievement and retention rates available up to the time of the inspection.

Work-based learning for young people																
Advanced modern apprenticeships	2001-02 2000-01		1999-2000 1998-99		1997-98		1996-97		1995-96		1994-95					
(AMA)	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Number of starts	18		15		17		16		13		13		14		12	
Retained	0		0		0		0	0	7	54	9	69	11	79	11	92
Successfully completed	0		0		0		5	31	7	54	9	69	11	79	11	92
Still in learning	18		14		14		8	50	0	0	0	0	0	0	0	0

#### **STRENGTHS**

- good basic engineering skills training
- good on-the-job training
- effective learner support
- good range of additional training and qualifications

#### **WEAKNESSES**

declining retention and achievement rates

#### OTHER IMPROVEMENTS NEEDED

- certificates for initial training
- better awareness by learners of additional support for portfolio-building
- better use of learners' existing knowledge and qualifications in planning training
- 22. There is good basic engineering skills training. All learners carry out a period of full-time off-the-job training to develop basic skills in engineering metalwork. All learners follow an initial 10-week training course. Mechanical learners have a further 10-week course to gain additional skills. Engineering products are produced, assembled and assessed throughout the basic training. Learners are shown how to maintain tools and equipment, develop and interpret engineering drawings, produce procedural specifications, and reinstate the workplace. Learners are also encouraged to work as a team. There are clear schemes of work, with good lesson plans and appropriate objectives, timescales, and the specification of learning resources. Training is provided by suitably qualified and experienced instructors in the Training Centre which is adequately resourced. The training is over and above the requirements of the modern apprenticeship framework. Currently, learners' achievements are not recognised through the award of certificates.
- 23. There is good on-the-job training. Learners gain a wide range of skills through an extremely varied programme of work experience. Learners are given a detailed plan for the dates and duration of their work placements in the relevant departments of the company. On entering each department, learners have a comprehensive induction covering health and safety and their learning objectives. Electrical avionics and airframe learners spend a few weeks in departments such as electrical wiring, planning, and design to further develop their skills before work placements of approximately six months. Learners work on military, commercial and corporate aircraft. Manufacturing support learners work on a wide range of aircraft components, using a variety of manufacturing processes, including manual and computer-controlled machining, fitting and hand skills. Manufacturing learners have detailed learning programmes for this period. A detailed plan is not provided for electrical avionics and airframe learners where training is dependent on the commercial demand for service.
- 24. There is effective learner support. On completion of their initial training, learners have an introduction to their NVQ, provided by instructors through two group sessions with each resulting in an action plan. Learners have a good understanding of the standards, evidence requirements and relevant evidence sources for the NVQ.

Instructors then carry out progress reviews every two months, to review action plans, discuss workplace activities, identify evidence requirements, and agree ongoing action plans. Learners can request additional meetings, although some learners are unaware of this. Copies of action plans go to the head of department. Learners are encouraged to discuss their development requirements on return to their work placement with the relevant head of department. Through this process, learners are encouraged to take responsibility for their own training. Portfolios are well presented, with a good variety of evidence. Assessment is carried out when learners and their instructors agree that all evidence is in place and meets the required standards. Assessment is thorough and appropriate for technician and craft learners but is inappropriate for manufacturing support learners, who are not continually assessed through the training programme. Although this is being rectified by the Training Centre, it is too early to measure the effectiveness of the process.

- 25. Learners are able to work towards a good range of additional qualifications. Some learners achieve diploma level. Learners are able to progress to a degree. As part of its commitment to lifelong learning, the company has introduced a policy of sponsoring employees for training in any related field. Learners also develop skills in a number of areas, recognised through certification, including health and safety, manual handling, and specific tool usage. Learners' achievements are frequently recognised through awards given by the company and the subcontracted colleges. The Marshall group of companies carries out an annual awards ceremony.
- 26. Every 10 weeks, appraisals of learner performance are carried out by appropriate workplace supervisors. Learners are assessed and graded against set criteria, and comments on performance are made by the workplace supervisor and department head. In manufacturing, the appraisal is carried out with the learner, mentor and department manager present, although this is not carried out in engineering. Appraisals are forwarded to Training Centre staff, who then interview the learner and complete the review process. Appraisal outcomes and milestone achievements are used to determine eligibility for wage increases.
- 27. Key skills training and assessment are subcontracted to a local college. Good assignments are set, and evidence from vocational training and the workplace is used to develop key skills portfolios. The achievement rate for key skills is excellent.
- 28. Retention and achievement rates are declining. The percentage of learners leaving the training programme without achieving the full framework increased from 21 per cent in 1994-95 to 46 per cent in 1997-98. The achievement rate for learners who started their training programme in 1994-95 was excellent at 92 per cent, but dropped to 54 per cent by 1997-98. The Training Centre has recognised this trend, has analysed exit questionnaires, and found that most learners left in their first year having made the wrong career choice. A number of strategies are now in place to rectify this, including giving clear guidance at career events and school visits, introducing a work taster for young people, and giving informative presentations on the type of work involved in aerospace engineering. It is too soon to measure the effectiveness of these actions.

29. The results of initial assessment tests combined with learners' prior qualifications are used to decide the most appropriate vocational training to help learners achieve their apprenticeships. Full account is not taken of learners' existing skills when planning individual programmes of work. Some learners have detailed on-the-job training plans. In manufacturing, these training plans identify how long a learner will spend in each area and the skills they will gain, but are the same for all learners. All learners are given a target of four years to complete their training programmes, regardless of prior experience or any additional learning needs. Many learners do succeed in completing their training programmes in less than four years.

#### **Good Practice**

Although the products learners produce during their basic skills training are replicas of aircraft components, they also produce a cold chisel, which requires many engineering processes, including polishing to a fine finish. There is also a traditional annual competition for the best chisel produced.

One of the colleges used for additional training is 35 miles from the Training Centre. Transport is provided for learners to and from the college.