

TRAINING STANDARDS COUNCIL INSPECTION REPORT  
APRIL 2000

ADULT LEARNING INSPECTORATE REINSPECTION  
AUGUST 2001

# AWE PLC

## Aldermaston



ADULT LEARNING  
INSPECTORATE

### **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.

### **Grading**

In summarising their judgements about the quality of provision in curriculum or occupational areas and about the quality of leadership and management, including quality assurance and equality of opportunity, inspectors use a five-point scale. The descriptors for the five grades are:

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

## SUMMARY

The original inspection of Atomic Weapons Establishment was carried out by the Training Standards Council's inspectors. The inspection resulted in a less than satisfactory grade being awarded for equal opportunities. This area has been reinspected against the requirements of the *Common Inspection Framework* by the Adult Learning Inspectorate, which replaced the Training Standards Council on 1 April 2001. The section of the original report dealing with equal opportunities has been replaced with the findings of the reinspection. Also, the report summary, report introduction and introduction to the inspection findings have been updated and reflect the findings of the reinspection. Sections of the report, dealing with areas which have not been reinspected, have been left in their original form. The amended inspection report is published on the Adult Learning Inspectorate's website ([www.ali.gov.uk](http://www.ali.gov.uk)).

**The Atomic Weapons Establishment offers good engineering training to NVQ level 3 for modern apprentices. There are high NVQ achievement levels and learners' retention. Apprentices attend good foundation training which includes interesting project work and then take up work placements around the extensive site at Aldermaston. There is little assessment by observation in the workplace. After a thorough initial assessment procedure and comprehensive induction, there is good support for learners. Many have the opportunity to progress and gain additional qualifications. Management of training is good with a strong strategic lead for training. There are well-documented procedures and comprehensive planning. Workplace supervisors have a poor understanding of NVQ procedures. Quality assurance is good with frequent feedback from learners sought and evaluated. There is effective action-planning for continuous improvement of training. The promotion of equality of opportunity is now satisfactory. Issues related to equal opportunities are covered in the learners' induction programme. Learners have a good understanding of equal opportunities. Although the organisation is taking a range of action to promote equal opportunities, it is not doing enough to recruit from under-represented groups on training programmes.**

### GRADES

OCCUPATIONAL AREAS	GRADE
Engineering	2

GENERIC AREAS	GRADE
Equal opportunities	4
Trainee support	2
Management of training	2
Quality assurance	2

REINSPECTION	
Equal opportunities	3

### **KEY STRENGTHS**

- ◆ good NVQ achievement and learners' retention
- ◆ good progression opportunities
- ◆ comprehensive health and safety systems
- ◆ comprehensive planning of off-the-job training
- ◆ well-documented and clear training centre procedures
- ◆ effective action-planning for continuous improvement
- ◆ effective action to increase learners' understanding of equal opportunities

### **KEY WEAKNESSES**

- ◆ insufficient action to recruit learners from under-represented groups
- ◆ weak structure for workplace training
- ◆ workplace supervisors' poor understanding of NVQs

## INTRODUCTION

1. The Atomic Weapons Establishment (AWE) is a top-secret, high-security organisation which is responsible for designing and manufacturing Britain's independent nuclear warheads. At present, the Trident weapons system delivers these, but it is AWE that designs, manufactures, maintains and calibrates the warheads used. It also deals with the disposal of redundant nuclear weapon systems. AWE has over 3,500 employees based on large sites at Aldermaston and nearby Burghfield. AWE has been at the centre of the national defence programme for 50 years, and apprenticeships have been offered throughout this period.

2. At the time of the original inspection, the engineering-training centre within AWE provided work-based training for 88 modern apprentices in engineering. The number of modern apprentices was the same at the time of the reinspection. All learners are employed by AWE plc, the operating company which employs the workforce in a government-owned/company-operated arrangement. At the time of the original inspection, the modern apprentices were partly funded by Thames Valley Training and Enterprise Council (TEC), which has been now replaced by the Berkshire Learning and Skills Council (LSC). They work towards national vocational qualifications (NVQ) at level 3 during their four-year apprenticeship. They also undertake additional qualifications at local further education colleges. Learners work in a broad range of technical areas, such as high-energy laser equipment, nuclear reactors, high-precision machining, information technology, electronics, and power generation.

3. Aldermaston is in a rural area in west Berkshire but has a population of over 200,000 within a 10-mile radius. The area's employment is dominated by the service sector. Only 10 per cent of the working population is employed in manufacturing and this figure is in decline. The unemployment rate in the area is low and at the time of the original inspection it was less than 1 per cent. At the time of the reinspection it was 1.3 per cent. In 1999, the proportion of school leavers achieving five or more general certificates of secondary education (GCSE) at grade C and above was 51.2 per cent, compared with the national average of 47.9 per cent. In 2000, this proportion had increased to 56 per cent, compared with a new national average of 42.9 per cent. Less than 2 per cent of the population are from minority ethnic groups. In nearby Reading, the figure is much higher, at 9.6 per cent.

## INSPECTION FINDINGS

4. AWE produced its first self-assessment report in April 1999. A second report was prepared in early 2000 in preparation for inspection. The learners' training manager was briefed on the self-assessment process by TEC staff. The views of team leaders, training staff, learners, the awarding body and three local colleges were obtained. Over 30 people were interviewed in total. Following the draft, the report was reviewed by the learners' training manager but due to time constraints, it was not circulated for final comments. The report contained only brief introductory paragraphs which did not give inspectors a clear view of the provision. AWE used the original inspection report as the basis for its self-assessment. It replaced the section on equal opportunities with a new one and accompanied this with an action plan. Inspectors agreed with the revised grade given in the amended report.

5. For the original inspection, three inspectors spent a total of nine days at AWE in April 2000. Inspectors conducted 16 interviews with staff, including workplace supervisors, managers, trainers and assessors. They also interviewed 30 learners. They observed reviews, visited six work placements and one further education college. Inspectors reviewed a wide range of documents including learners' files, NVQ portfolios of evidence, management information and promotional literature.

6. Two inspectors reinspected AWE in August 2001 and spent a total of four days at Aldermaston. They interviewed 14 learners, visited five work placements and conducted 12 interviews with managers, supervisors and trainers. They reviewed the new procedures, minutes of meetings and other documents, observed a training session which was graded 2, and an assessment.

### OCCUPATIONAL AREAS

#### **Engineering**

#### **Grade 2**

7. There are 88 modern apprentices in engineering. The company needs 20 to 30 new qualified craftspeople and technicians each year in precision machining, mechanical fitting, electrical fitting and electronics. Training is managed from the engineering-training centre. Placements are allocated around the very extensive site and facilities within AWE. All apprentices undergo general safety training at the training centre and specific safety training in the facility to which they are allocated. In addition, apprentices attend one of three further-education colleges for additional training and qualifications. Apprentices following the NVQ level 2 engineering programme attend the training centre for up to 12 months, pursuing an engineering foundation NVQ at level 2. In the case of precision machining, electrical and electronics, apprentices spend up to two years in the training centre. Work-based training is carried out in placement. On completion of NVQ level 2,

apprentices progress to level 3 and are then assessed in the workplace. Key skills training is delivered in the training centre, at college and in the workplace. Staff, who are qualified NVQ assessors, deliver the training and review apprentices' progress in the workplace monthly. The workshops are split into three prime engineering areas, machine shops, electrical installation and electronics. The machine shops have a combination of lathes, milling machines, drills, grinders and bench equipment. Staff are experienced in the engineering industry and are time served. In addition, most have teaching and assessor qualifications. Achievement and retention rates for the past three years are as follows: in 1997, 120 NVQs per 100 leavers; 1998, 130 NVQs per 100 leavers; and 1999, 153 NVQs per 100 leavers. Over the last three years, all apprentices have been offered jobs by the company on completion of their training. The self-assessment report claimed a number of strengths and weaknesses. Some of the strengths represented no more than normal practice. Inspectors identified further strengths and weaknesses and awarded a grade lower than that given in the self-assessment report.

#### *STRENGTHS*

- ◆ good NVQ-achievement and apprentice-retention rates
- ◆ highly effective off-the-job training
- ◆ good progression opportunities
- ◆ creative use made of projects and assignments
- ◆ comprehensive health and safety systems

#### *WEAKNESSES*

- ◆ not enough observation for assessment purposes
- ◆ under-developed training and assessment arrangements in work placements

8. The training-school projects, assignments and training procedures are highly effective. Training is well structured and progressive. Regular reviews take place and training sessions are modified to suit individuals' needs. There are regular opportunities for assessment. Initial engineering-foundation training is delivered in the engineering training centre in accordance with company procedures leading to an NVQ at level 2. Apprentices attend the centre full time and undertake a range of practical projects and assignments. They produce six useful items contained in an engineer's toolbox, such as thread gauge, sine block, scribing block, toolmaker's vice, tap wrench and engineers' square. Similar practical projects exist in electronics. The project work supports current industrial practices, satisfies the performance criteria for the NVQ elements being assessed and is of practical use to the apprentice when completed. Projects are also carried out in the local community to add interest and variety to the training programmes. Apprentices have worked on projects such as the repair and maintenance of clocks in a local church, and upgrading of the local school science laboratories. Apprentices are encouraged to acquire skills at their own pace. While targets are set, apprentices are not pressurised or rushed to the detriment of their learning programme. The

emphasis is on learning the skills of the trade rather than purely getting a qualification. More able apprentices are able to progress rapidly and complete their qualification earlier than originally planned.

9. All apprentices undertake additional qualifications at college. Colleges have a wide range of well-maintained resources and there has been substantial investment in new buildings and equipment. Well-resourced library facilities and information technology resource centres exist in each college. Apprentices are encouraged to take advantage of the wide range of courses available such as national and higher national certificates, with a view to progression to degree-level studies.

10. Key skills are fully integrated in engineering programmes and apprentices have a high level understanding of key skills. Efforts are made in the selection of jobs used for assessments to include key skills and to collect evidence of competence. At one of the colleges, the apprentices are all given e-mail addresses and access to the college intranet for their personal use. The college also has a library suite of information technology stations and apprentices are encouraged to make use of these facilities. The same college also makes examination results available to apprentices via e-mail in an attempt to bring modern communication techniques to their everyday lives. This results in a high level of awareness by apprentices of key skills. In one placement, a final-year apprentice carried out work installing monitoring apparatus for fans controlling a contaminated area. After completion, he made a presentation to senior managers and colleagues on the work he had done, providing assessment evidence for key skills units.

11. During induction and throughout training, great emphasis is placed on system safety as well as personal health and safety. Progression to on-site placement training is only allowed when apprentices have demonstrated an appropriate level of knowledge, discipline and maturity, plus an understanding of the 'company safe system of working'. On starting a placement, a health and safety briefing is given for the area and the apprentice must successfully complete a task book on the subject before starting work. All protective personal equipment is provided by the company and staff act as good role models in the rigorous attention they pay to safety, and wearing of equipment.

12. Entry to the apprenticeship scheme is selective and many apprentices have obtained good GCSE examination results. For some apprentices, engineering is not their first choice of vocation but the training offered by the company is highly regarded and encourages apprentices into engineering. On completion of the initial assessment, induction period and placement, apprentices are well motivated and enthusiastic. Relationships between apprentices, trainers, workplace supervisors, career advisors and college staff are excellent. There are sufficient trainers who have good qualifications, industrial experience and are occupationally competent to deliver training in occupational areas to apprentices with diverse backgrounds. Apprentices have access to good support material in work-related training assignments.

13. Each apprentice has a training centre mentor and an 'apprentice master' (operations mentor) when on placement. Apprentices are well disciplined, punctual and are able to work with minimum supervision.

14. Not enough direct observation assessment is carried out in the work placements and a heavy reliance is made upon witness testimony. Witnesses verify that work has been carried out to their satisfaction but some are not aware of the NVQ criteria. The status of witnesses is not recorded on job sheets and no register of witnesses or their credentials is identified in apprentice's portfolios, although it is held centrally.

15. The training procedures and the links with work placements are under-developed. The quality of experience provided by placements varies. Some are exciting and interesting and others, where the workflow is slow, are dull. The rotation every three to six months enables apprentices to generate all the evidence needed for the NVQ without any simulation. There is very little provision for assessment in the workplace of the NVQ assignments at level 3. The apprentice masters and supervisors do not assess. Witness statements and job cards are used as evidence of work done and assessed later by training-centre assessors in the training centre. In some cases, there are delays in the assessment of evidence.

## **GENERIC AREAS**

### **Equal opportunities**

### **Grade 3**

16. There are currently 88 learners on engineering programmes. Two learners are female and two are from minority ethnic groups. There are also 13 learners who have been offered engineering apprenticeships, but are awaiting security clearance. AWE recruits its learners locally and promotes its training programmes at schools and careers fairs. Applications forms are monitored and equal opportunities data on applicants are collected. The organisation has written a new self-assessment report on this generic area. Inspectors mainly agreed with the strengths and weaknesses identified in the report and the grade given by AWE.

At the original inspection, the main weaknesses identified were:

- ◆ apprentices and staffs poor awareness of equal opportunities
- ◆ little action to promote equality of opportunity
- ◆ no analysis of equal opportunities data

17. Following the original inspection, AWE developed an action plan to rectify the weaknesses and consolidate the strengths identified by inspectors. Staff have undertaken training in equal opportunities. Some have attended training days provided by the local LSC and have passed on what they have learned to

colleagues. Staff have undertaken further training in the training school using computer-based programmes. The induction programme has been redesigned to include coverage of equal opportunities. Since the original inspection, learners have developed a greater understanding of equal opportunities. Reference is now made to equal opportunities during learners' progress reviews. The accessibility of accommodation to persons with mobility problems has been carried out and a plan has been drawn up to improve it. Little action has been taken to rectify the weakness relating to the lack of analysis of equal opportunities data. Advertisements in the local press and on the organisation's website still contain no reference to equal opportunities.

### STRENGTHS

- ◆ effective action to increase learners' awareness of equal opportunities
- ◆ good coverage of equal opportunities during learners' induction
- ◆ clear and concise equal opportunities policy

### WEAKNESSES

- ◆ inadequate analysis of recruitment data
- ◆ insufficient efforts to recruit learners from under-represented groups

#### GOOD PRACTICE

*During induction, learners sign up to a charter, thereby confirming that they understand what constitutes appropriate behaviour and that they will maintain respect for others throughout their apprenticeship. In the organisation's newspaper, which has a wide circulation, this procedure has been cited as an example of good practice in the promotion of equal opportunities.*

18. Over the last year, AWE has made significant progress in improving its promotion of equal opportunities. An action plan was disseminated to a committee comprising senior managers who have responsibility for various activities across the facility. Following the implementation of this action plan, some inappropriate pictures of an overtly sexist nature have been removed from walls. Staff questioned why this should be done, and their awareness of equal opportunities has been improved. There has been more effective action to promote equality of opportunity. Procedures for countering bullying and harassment have been improved. All staff in the training school have undertaken training in equal opportunities, but this has not been extended to the workplace supervisors. Good links exist between AWE and the Employment Service. In its dealings with outside agencies, the organisation has emphasised its commitment to respecting cultural diversity and to upholding equality of opportunity and it now receives more applications from people with disabilities. Following a review of the accessibility of accommodation, AWE has taken action to make its premises more accessible to people with mobility difficulties.

19. Learners have a good understanding of equal opportunities. In most cases, this extends beyond their rights and they are aware of their responsibility to use appropriate language at all times and show respect towards others. Their induction process lasts for two weeks and now includes a session on equal opportunities taken by the head of the centre. The content of this session is drawn from that of the training sessions on equal opportunities attended by staff and has been tailored to meet the learners' needs. Learners said the coverage of equal opportunities

during their induction was effective. Learners are also encouraged to use the computer-based equal opportunities training package before starting work in the various sections in the company. During the learners' progress reviews, reference is made to equal opportunities in order to strengthen learners' understanding of key issues. Checks are also made on whether the learners consider they are treated fairly in accordance with the principles of equality of opportunity.

20. The organisation now has a human resources policy statement which makes reference to equal opportunities and diversity. The statement is an effective and visible way of stating the company's commitment to equal opportunities. It highlights grievance and complaints procedures and states what the company agrees to provide along with what is expected from its employees. A further, more detailed policy outlining direct and indirect discrimination and legislation supports the statement.

21. Equal opportunities data on applicants for training at AWE are collected through the monitoring of application forms. These data, however, have yet to be analysed to check whether action to promote equal opportunities is proving effective, or to identify trends in recruitment.

22. Publicity materials do not promote equal opportunities sufficiently. In its advertisements in the local press and on its website, the organisation does not state that it is committed to upholding equality of opportunity and that it welcomes applications from people from under-represented groups on training programmes, such as women and members of minority ethnic communities.

## **Trainee support**

## **Grade 2**

23. Almost half of the apprentices recruited is referred to AWE by the careers service. Others are recruited directly through school fairs and newspaper advertisements. Some applicants approach the company directly, aware of its good reputation in the area. The programme is also advertised on the company website. The selection process includes a range of psychometric tests, a medical, an interview and a security check that takes a minimum of six months to complete. The induction programme consists of talks on a variety of issues, with a range of speakers from different parts of the organisation. Progress reviews during the first two years occur weekly and once the apprentice is on placement, monthly. Apprentices' progress is tracked and charted and a progress report presented to the senior management committee each quarter. Apprentices have access to on-site facilities such as a nurse, welfare services and a qualified counsellor. The self-assessment report recorded two strengths for this aspect. Inspectors agreed with these and found additional strengths. Inspectors disagreed with the weaknesses cited in the self-assessment report but found another weakness. The inspection grade awarded was the same as that given by the company.

### STRENGTHS

- ◆ apprentices' achievement highly valued
- ◆ rigorous initial assessment process
- ◆ comprehensive induction process
- ◆ extra support for apprentices with difficulties
- ◆ wide range of activities for personal development

### WEAKNESSES

- ◆ reviews not used to update training plan

#### GOOD PRACTICE

*To encourage people to apply for apprenticeships, a website has been produced by one of the apprentices. The site contains details of the apprenticeships on offer, and illustrates some of the social activities undertaken by the apprentices. The site provides useful information for those thinking of taking up an apprenticeship.*

24. Apprentices' achievements are highly valued. Apprentices have full access to all facilities and services enjoyed by other company employees. This includes a generous company pension scheme, health and death benefits. There is also a company bus that runs to rural areas for those apprentices without transport. There are a number of incentive schemes for apprentices such as a pay rise for those who achieve their first-year targets. There is an 'apprentice of the year' award with monetary prizes given. There are a number of other awards for various achievements. A company magazine is published regularly, highlighting personnel news and addressing current vacancies. These benefits help apprentices feel valued and enhance their learning experience.

25. Initial assessment includes tests to assess technical understanding, numerical computation, numerical reasoning, mechanical comprehension, and spatial recognition. A marking grid has been developed and is used as a rough predictor of the applicants' performance. The results are also used to assess whether the apprentice needs extra support with key skills, especially numeracy. Results of the tests act as a focus for the interview where apprentices' responses are checked against a clear person specification. Tutors work to an agreed interview plan that includes questions on specialisation choice, technical knowledge, hobbies and safety. Advice given to applicants on career choice is based on results from the psychometric test. Those apprentices who have done exceptionally well are advised to increase their aspirations and attempt a higher-level programme. Those who have performed less well are encouraged to attempt a more realistic option. The low rate of early leavers is testament to the effectiveness of the selection process and subsequent good support.

26. The induction process is very thorough. The initial programme lasts for one week. Further inductions to each work placement are also provided. The duration of these varies according to the topics to be covered. Topics range from health and safety, security, welfare, personnel services and trade union facilities, to pensions, security, wage structures and general administration. All apprentices can remember the induction and are aware of their rights. Although equal opportunities is mentioned, it is not a timetabled part of the process.

**GOOD PRACTICE**

*A website has been produced by one of the apprentices. It has been a project which has involved a range of skills, adding evidence to the NVQ. The site contains details of the apprenticeships on offer, as well as illustrating some of the social activities undertaken by the apprentices. The site provides useful information for those thinking of taking up an apprenticeship for a career.*

27. AWE is responsive to apprentices' needs and is sensitive to any negative feedback. There is extra learning and personal support for those in need. For example, one apprentice who had a family bereavement had a placement especially arranged for him in Scotland so that he could spend time with his family at this crucial stage in his life. For another apprentice who had decided to move to a different part of the country during the first year, the training manager spent much time and energy finding a suitable training programme in another company. Specialist learning support has been provided for two apprentices with dyslexia and a number of apprentices receive extra tuition at college for maths. More able apprentices are offered sponsorship through university and a number have taken this option.

28. There are many additional activities for personal development. There is a social club run by the apprentices. This is encouraged by the company and apprentices undertake a variety of activities outside working hours. Activities include canoeing, go-karting and bowling. Apprentices are also involved in community activities including building and sailing a raft down the river with other local groups in aid of charity, and participating in outward-bound courses. A visit to the Millennium Dome is planned for up to 50 apprentices. One apprentice acts as secretary for the company's community committee, and has a chance to be involved in decisions regarding the allocation of funds to charitable causes. Apprentices are also encouraged to be involved in presentations to groups of school children. Apprentices operate their own apprentices' association, and are encouraged and supported by the company. Regular games sessions are organised by the training-centre staff and there is an annual public speaking competition. These activities help develop team building and personal skills.

29. Progress reviews are not used as an opportunity to update the training plan but focus instead on personal development, and general conduct. Progress towards the NVQ is not included in the discussion. Gaps in evidence collection are not identified promptly, slowing progress towards the NVQ.

**Management of training**

**Grade 2**

30. Craft and technician training at AWE is within the sites-development department headed by a director. An apprentice-training manager reports to the director and leads the section of 13 staff, including a training-support officer and eight instructor/assessors who hold assessor qualifications. Three instructors are responsible for the apprentices while on their work placement, and five are responsible for apprentices in the training centre. Three of the instructors are qualified internal verifiers. There are detailed work procedures for recruitment, training and staff appraisal and development. There are further, specific procedures for the modern apprenticeship, NVQ assessment and verification arrangements. Three colleges of further education in nearby towns provide off-the-job training. Work placements are provided throughout the company in operational

business departments. The company achieved Investor in People Standard in March 2000. The self-assessment report identified some strengths and weaknesses for this aspect. Inspectors agreed with some and found additional strengths and weaknesses. Inspectors agreed with the self-assessment grade.

#### STRENGTHS

- ◆ clear planning of training
- ◆ strong strategic leadership
- ◆ good arrangement for staff development and appraisal
- ◆ open, consultative management style

#### GOOD PRACTICE

*As an example of good open communication, teams throughout AWE who have news to share such as a new research discovery or successful weapon decommissioning, hold a 'focus lunch' where a section of the canteen is reserved for any employee to listen to a presentation whilst eating. Apprentices regularly attend them on a voluntary basis.*

#### WEAKNESSES

- ◆ no formal monitoring of subcontracted work
- ◆ low NVQ awareness among workplace supervisors

31. Training is managed well, with effective policies and procedures which detail the routes to achieving the apprenticeships. The procedures are regularly reviewed by staff, are clearly worded and plainly explain the system for all facets of the training programme. Job roles and responsibilities are clear. Planning of apprentice placements is good, ensuring that the movement of apprentices is precisely timed and that appropriate experience is given to enable them to progress through the NVQ. Apprentices and staff have a crystal clear idea of where they are and where they are going. Achievement and retention data are readily available. Recruitment, induction and deployment of staff are sound. Staff have a high level of occupational competence.

32. There is a strong corporate strategy for the apprenticeship programme. There is an apprentice-training board, chaired by a director and consisting of senior operational managers, trade union representatives and the apprentice-training manager. This board sets the projected future target number of apprentices needed to meet anticipated future demand within the company. The board is also effective in reviewing progress of the individual apprentices, and setting long-term training requirements to meet future needs. The company's annual strategic plan sets objectives and broad targets. A copy of the plan is given to each employee, including apprentices. From this plan, divisional plans are produced which contain local targets.

33. Staff appraisal takes place annually and is comprehensive. Each individual is assessed against a set of performance criteria. The assessment is comprehensive and leads to the production of a personal-development plan set against the individual's objectives. The objectives are realistic, match the individual's work role and are closely monitored and reviewed throughout the year. Staff development is highly relevant and courses undertaken include assessor

qualifications, health and safety, and drug awareness.

34. The apprentice-training manager is readily available to staff, and instructors are encouraged to discuss any issues of concern. Apprentices also feel comfortable to approach the apprentice-training manager if needed. Staff have a sound knowledge of the training being delivered, and quickly identify and resolve any difficulties. Communication within the training department is open and clear and staff and apprentices feel free to comment on the training. There are regular meetings held at least fortnightly. The apprentice-training committee, which reviews the quality of training, meets quarterly. The meetings are well recorded and there are clear minutes and actions to be taken. Senior managers hold regular staff briefings and there is an operations meeting each week. Relevant information is passed on to trainers and apprentices.

35. Supervision of the work done by the college is mostly informal. Contracts are in place between AWE and the colleges but no service-level agreement has been drawn up. The company does not regularly observe training in college or obtain copies of external verifier reports. AWE does not gain access to feedback on college courses from its students.

36. In many cases, staff in the operational sections who supervise apprentices have very little knowledge of NVQs. They view their role as simply providing work experience and leave the explanation of the NVQ and its assessment to the instructors in the training centre. The planning of the on-the-job training is not co-ordinated with information coming from the monthly reports. Some supervisors lack awareness of the need to plan training and have little knowledge of the requirements of the NVQ. This lack of knowledge creates a missed opportunity to consolidate and co-ordinate the training with the operations workload. An action plan is in place to give additional help to the workplace supervisors to both plan and co-ordinate training requirements to give apprentice masters and supervisors a better understanding of NVQ.

## **Quality assurance**

## **Grade 2**

37. AWE has documented quality assurance procedures. The apprentice-training manager is responsible for the organisation, control and quality assurance of apprentice training. This model of organisation ensures that the company's major provider of the trained technicians has direct responsibility for the quality assurance of the training schemes. The production of nuclear weapons, by their hazardous nature, has always been quality assured, and the same culture exists in apprentice training. The company's training procedures are detailed. They are updated regularly and referred to by staff. There is a system of control cards that tracks the progress of the assignments the apprentices undertake. The company produces performance statistics and uses questionnaires to obtain feedback from apprentices at various points in the training programmes. Apprentices' views are recorded, evaluated and action plans are devised to improve the quality of the

programmes. AWE uses nuclear reactors in its work and has a nuclear site licence, and holds ISO 9001 accreditation. The self-assessment report was complete and informative but claimed many strengths which inspectors considered to be no more than normal, and few weaknesses. The grade awarded by inspectors is the same as that given in the self-assessment report.

#### *STRENGTHS*

- ◆ well-documented and clear quality assurance procedures
- ◆ rigorous monitoring of quality assurance procedures and action plans
- ◆ effective arrangements for internal verification
- ◆ good use made of feedback
- ◆ successful action planning for improvements

#### *WEAKNESSES*

- ◆ underdeveloped site placement monitoring

38. There are good, detailed quality assurance procedures in place, which meet the requirements of the TEC and the awarding body. In addition to the company's rigorous site quality procedures, procedures have been extended include specific procedures for training. These are very precise and detailed. The quality assurance manual is regularly updated and regularly referred to by staff. In the training centre, a legend card system is in operation, which records the work in progress, throughout the production of apprentices' assignments. The system is particularly effective in helping staff to identify at a glance the progress of each apprentice, and show where improvement may be needed. All of the company systems have been used to drive quality assurance in training and have led to consistently high standards and impressive results in training. Achievements have never fallen below 100 NVQ's per 100 leavers since 1996.

39. Staff are fully aware and are involved in the review of the quality assurance procedures. The quality of the training is under the constant monitoring of the apprentice-training committee, which meets quarterly. The members of the committee include representatives from all sectors, including apprentices.

40. Internal verifiers are clear about their responsibilities for monitoring the quality of training and assessment and reporting to awarding bodies. Assessment results are regularly sampled and reviewed, but the quality of on-the-job training is not compared across all of the placement areas and there is no sharing of good practice in the placements. The internal-verification procedures follow the awarding-body guidelines and are rigorously monitored and applied. Action required by external verifiers is given high priority and dealt with effectively.

41. Feedback is regularly sought from staff and apprentices using questionnaires.

The results are used to develop action plans for continuous improvement. Feedback is centrally collected and disseminated to staff during centre-team meetings, which are held fortnightly.

42. In contrast to the close control of training which takes place in the training centre, training in the work placements is less well monitored. Monthly reports on apprentices produced by the workplace supervisors tend to concentrate too much on personal performance, and fail to cover the training undertaken and further development needs. Assessors do not visit the work placements to see at first hand the quality of the training they are receiving.

43. The company's self-assessment report provides a broad background to the operation of the business and information on some of the challenges faced when working within the security measures of a top-secret site. Although informative, the report does not attempt to evaluate the work of the subcontractors. Inspectors agree with the self-assessment grade for apprentice support, management of training, and quality assurance. AWE over-estimated the quality of its engineering-training programme and overlooked some serious weaknesses, relating to equality of opportunity.