- **39** Drive down slopes in low gear and low throttle. If suitable, the handbrake can be applied gently to help braking.
- 40 The vehicle must not be used after an overturning incident unless a competent person has examined the vehicle and ROPS.

MAINTENANCE

41 Carry out daily, weekly and periodic maintenance in accordance with the manufacturer's recommendations.

LOADING

- **42** Any load carried on the vehicle must not exceed the manufacturer's recommended capacity.
- 43 The load needs to be correctly distributed, kept as low as possible and properly secured to minimise its effect on steering, stability and braking efficiency.
- **44** The load must not obscure the operator's view of the route.

TRANSPORTING ATVS

- **45** Before loading an ATV onto a transport trailer, check the trailer load capacity, lights, brakes etc.
- □ 46 After loading, ensure the ATV is securely restrained. Do not rely on the ATV brakes to prevent movement on the trailer.

ROAD USE

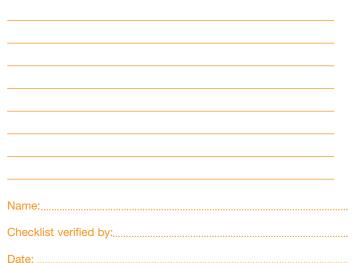
47 For use on roads, ATVs need to comply with the Road Vehicles (Construction and Use) Regulations 1986 and the Road Vehicles Lighting Regulations 1989. They also need to be suitably insured and meet any vehicle excise duty requirements.

FURTHER READING

ATV Quad Bikes	FISA701
Emergency planning	FISA802
First aid at work: Your questions answered	INDG214
Managing health and safety in forestry	INDG294
Don't lose your hearing	INDG363

These publications are available from the FISA and HSE websites.

NOTES



Further information

This guide is produced by the Forest Industry Safety Accord (FISA) 59 George Street, Edinburgh, EH2 2JG Tel: 0131 240 1410 Fax: 0131 240 1411 Email: info@ukfisa.com

Copies of this guide and all other FISA priced and free publications are available by mail order from the FISA office or through the FISA website www.ukfisa.com. From here you will also be able to access a wide range of additional forestry safety information including frequently updated safety alerts.

This guide sets out evidence of good practice for a specific forestry task. Deviation from the guide should only be considered after a full risk assessment has been undertaken by competent persons. Health and safety obligations MUST be met at all times.

THINK SAFE / STAY SAFE

This publication is based on guidance previously published by HSE in AFAG702 All-terrain vehicles, which was withdrawn in 2013.

For more general information about health and safety, please visit the Health and Safety Executive website www.hse.gov.uk



All-terrain vehicles



FISA Safety Guide 702

INTRODUCTION

This leaflet covers the safe working practices to be followed when using all-terrain vehicles (ATVs). ATVs are sit-in vehicles that are designed specifically for off-road use. See also FISA leaflet 701 *ATV quad bikes*.

This leaflet does not cover the additional safety requirements needed for the application of pesticides or operating powered ancillary equipment and is not a substitute for proper training.

You can use this leaflet, along with the manufacturer's handbook, as part of the risk assessment process to help identify the controls to put in place when using ATVs.

You must also assess the effect of the site and weather as well as following this guidance.

All operators must have had appropriate training in how to operate the machine and how to carry out the tasks required (see FISA leaflet 805 *Training and certification*).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- **1** Use the following PPE:
 - Eye protection (a visor or safety glasses to EN 166), against flying insects, dust or branches.
 - Hearing protection (complying with EN 352) needs to be provided where vehicle noise levels exceed 85 dBA, and must be worn where emissions exceed 90 dBA.
 - Protective boots with good grip and ankle support (complying with EN 345-1), when loading or unloading the ATV.
 - Gloves, for loading and unloading.
 - Non-snag outer clothing. The use of high-visibility clothing may also be appropriate.
- 2 You should carry a personal first-aid kit including a large wound dressing (see HSE leaflet INDG214 First aid at work: Your questions answered).
- **3** You should carry a fire extinguisher in the ATV where possible.

GENERAL

- 4 Do not carry passengers unless the ATV is specifically designed for that purpose. Refer to the manufacturer's handbook for the maximum number of people to be carried and any other restrictions.
- **5** ATV capabilities and responses vary. If an ATV is changed, the operator may require retraining.
- □ 6 The manufacturer's recommendations for operation and maintenance must be followed at all times.

7 ATVs used in forestry need to be fitted with rollover protective structures (ROPS) and seat belts, where there is a risk of being crushed or ejected during rollover. This protection needs to extend to all passengers being carried.

PRE-START CHECKS

- **8** Check the fluid levels fuel, oil, coolant, battery and brakes.
- **9** Check the brake operation foot and parking brakes.
- 10 Check the tyres pressures, wear and visible damage. Check the tracks (where fitted) for wear, visible damage and tension.
- **11** Check the security of the wheel nuts.
- **12** Check the steering, for smooth and positive operation.
- **13** Check the throttle, for smooth operation.
- 14 Check the security and adjustment of the seats, seat belts, carriers and loads (including anything carried within the cab area).
- **15** Check all lights including warning lights.
- **16** Check the clutch (if manual), for smooth and positive operation.
- **17** Check the windscreen and windscreen wiper operation.
- **18** Make sure you have enough fuel for the planned journey.

EMERGENCY PROCEDURES

- 19 Ensure a designated and responsible person knows the daily work programme and suitable emergency contact procedures. Where possible use a mobile phone or radio and a pre-arranged call-in system.
- □ 20 Ensure the operators can provide the emergency services with enough detail for them to be found if there is an accident, eg the grid reference, the distance from the main road, the type of access (suitable for car/four-wheel drive/emergency service vehicles). Know the location details before they are needed in an emergency. (Also see FISA leaflet 802 *Emergency planning*.)

PARKING

- 21 Always park the ATV in a suitable position with the parking brake applied. Engage gear if appropriate.
- **22** Switch off the engine and remove the keys.
- **23** Immobilise the machine if parked in an area of high public use.

STARTING PROCEDURE

- 24 Close the doors if fitted.
- **25** Fasten the seat belt(s) where fitted.
- **26** Ensure the parking brake is properly applied and the gearbox is in the neutral position.
- **27** Start the ATV only from the driving position.
- **28** Do not run the engine for long periods when parked in enclosed spaces.
- 29 Ensure any passengers are properly seated and no one in the immediate vicinity will be endangered when the ATV moves off.

ROUTE PLANNING

- 30 Plan your route to avoid severe slopes and unstable ground conditions.
- **31** Always survey deep vegetation to identify any hidden obstructions.
- 32 Plan regular routes to avoid rocks, stumps, drainage ditches and steep slopes. Drainage ditches should be piped or bridged on regular routes. Thatch soft spots where necessary. Luminous marker posts may be used on permanent routes to aid the operator in poor weather or light conditions. Remove the lower branches of trees on regular routes.

ROUTE PLANNING

- **33** Use the appropriate driving technique for the vehicle.
- **34** Select and use only routes that are within the capabilities of the vehicle and the operator.
- **35** Avoid driving on side slopes by route planning.
- **36** Use speeds appropriate to the terrain and tasks.
- 37 Avoid changing gear on slopes. Select a suitable low gear before negotiating the slope or obstacle.
- **38** It is not possible to set a maximum safe slope. The ability to negotiate a slope safely will vary with:
 - the competence of the operator;
 - the type of ATV being used;
 - the load weight and distribution, including mounted or trailed equipment;
 - the tyre or track type, condition and pressures;
 - the ground conditions, including soil type, evenness and vegetation;
 - the weather conditions dry, wet, frosty etc.