



Driver Training and Endorsement Strategy

Discussion Paper

4 May 2009

Contents

1 Purpose	1
2 Background.....	1
3 Current situation	1
3.1 Australian Fire Competency Standards.....	2
3.2 On-road driver training	3
3.3 Off-road driver training	3
3.4 Current driver training programs being delivered.....	4
3.5 Other Emergency Service Organisations driver training.....	6
3.6 WorkSafe legislation and expectations	8
3.7 Coroners expectations.....	8
Issues for decision.....	9
4 Discussion.....	10
4.1 Appropriateness of current driver training	10
4.2 Preferred driver training	10
Issues for decision.....	12
4.3 Process for obtaining new competency	13
Issue for decision.....	14
4.4 Process for OICs endorsement	18
4.5 Process for skills maintenance	18
Issues for decision.....	19



5 Issues that impact on implementation of a driver training strategy 19

 5.1 Consultation with VFBV Association/UFU..... 19

 5.2 Instructor numbers 20

 5.3 Volunteer availability..... 21

 5.4 Appropriate training locations 22

 Issue for decision 23

 5.5 Availability of appliances 24

 5.6 Record keeping 24

 5.7 Costs 24

6 Timeframe for implementation of new driver training program..... 25

7 Numbers to train 25

Appendix A: PUAVEH001A – Drive under operational conditions competency.....A-1

Appendix B: FPIFGM3208A – Perform complex 4 x 4 operations competency B-1

Appendix C: Relevant section of OH&S legislation..... C-1

Appendix D: Drive CFA vehicles matrix D-1

Appendix E: Draft driver endorsement check list.....E-1

Appendix F: Fiskville off-road driver training facility F-1

Appendix G: Example hazard assessment form G-1

1 Purpose

The purpose of this document is to capture and address issues, provide information, and proposals for discussion on a driver training and endorsement strategy for CFA.

2 Background

Since CFA's inception in 1945 there have been 23 vehicle incidents which have resulted in the death of a firefighter. This is more than double the number of fatal fire incidents (11), although there have been a number of fire incidents with multiple fatalities. Vehicle incidents are responsible for 25% of all firefighter fatalities. Currently, CFA has approximately 3500 vehicles on the road and average three significant vehicle incidents per year. Collision/incident statistics for the financial year 2007–2008 show there were 189 claims of more than \$500 made, of which 161 were "CFA at fault" incidents, both these statistics have increased at about 7% a year over the past four years. The total dollar cost to CFA last financial year was approximately \$499,000.

CFA requires all drivers to have the appropriately endorsed Victorian drivers licence and also the endorsement of the brigade OIC to drive the vehicle. However, there is no requirement to have completed any form of driver training either on or off-road, although a number of courses are offered.

While courses are currently offered, there is no coordinated organisational approach to the conduct of driver training at this time. The amount of training being conducted in an Area is driven by the perceived risk, available resources and funds. Consequently the emphasis and amount of driver training being undertaken across the state varies considerably from Area to Area.

The recent incident involving the Campbell's Creek Tanker and resultant investigation has highlighted the need for a consolidated review of all driver training and the OICs endorsement process across the organisation.

3 Current situation

Driver training programs are currently being conducted across the state for volunteers on a voluntary basis and include instruction on legislation and policy, and on-road and off-road driving skills. These programs are linked to a number of different formal qualifications depending on who delivers the program and to what level.

Programs are being delivered by CFA staff, volunteer driver educators and a number of external providers, which may give rise to inconsistency in the level and types of programs being delivered and therefore, the competence of the drivers. This is particularly the case in the off-road driver training where Areas are delivering their training to local conditions and may not be covering all the elements and associated performance criteria required to cover all risks found when driving CFA vehicles in all parts of the state.

A scan of the training being delivered across the state shows that on-road driver training is being delivered to one competency, *PUAVEH001A – Drive under operational conditions*, and off-road driver training is being delivered to three different competencies, *FPIFGM3208A – Perform complex 4 x 4 operations*, *SRODRV002B – Drive a 4WD vehicle in difficult terrain* and *TDTC2501A – Operate 4WD vehicles*. However, exactly what elements and performance criteria are being delivered and assessed is not necessarily clear.

The three off-road competencies are similar in content apart from some key elements. *TDTC2501A – Operate 4WD vehicles* includes a recovery element (i.e. operate jack) which CFA does not normally cover and does not include a water crossing element. *SRODRV002B – Drive a 4WD vehicle in difficult terrain* does cover all the elements required, however, the evidence guide requires that the difficult terrain element is assessed over a minimum of two different occasions which is not practical for CFA purposes.

Currently the data from TRAIN indicates that CFA has 5239 members trained in on-road driving and 2456 trained in off-road driving. Whilst these numbers are significant there are still a very large number of drivers with no formal qualifications, estimates are a further 8500 to 9000 need on-road competencies and 7500 to 8000 require off-road competencies.

3.1 Australian Fire Competency Standards

Prior to July 2005, Australian Fire Competency (AFCs) standards were the national standard CFA trained to. They were developed and endorsed in 1994, and provided the basis for the development of fire service training. In relation to driving, the standards were developed into four training modules.

- **1.04 – Drive vehicles 1:** the purpose of this module is to provide the participant with the knowledge and skills to drive an emergency vehicle under normal road traffic conditions, without injury to passengers or other road users
- **2.03A – Drive vehicles on-road (legislation):** the purpose of this module is to provide the participant with the knowledge and skills to drive an emergency vehicle under operational conditions
- **2.03B – Drive vehicles off-road:** the purpose of this module is to provide the participant with the knowledge and skills to drive an emergency vehicle under operational conditions
- **2.03C – Recover vehicles:** the purpose of this module is to provide the participant with the knowledge and skills to recover a disabled vehicle under emergency conditions.

CFA's training programs have been designed to meet its operational needs and each program was evaluated to determine what credits could be granted towards the AFC modules above.

AFC module *1.04 – Drive vehicles 1*, is a pre-requisite for satisfactory completion of *2.03A* and *2.03B*. CFA did not choose to cover the content involved in *2.03C – Recover vehicles*.

In July 2005, the credits awarded for the successful completion of CFA's training packages migrated from Australia Fire Competencies (AFCs) to Public Safety Training Package (PSTPs). This required a process of comparing the existing AFC outcomes to the PSTP elements to ensure the required elements of training were delivered and existing competency credits could be granted.

3.2 On-road driver training

As a result of the migration to PSTPs, on-road driving is currently assessed against the criteria for *PUAVEH001A – Drive under operational conditions* (a copy of the competency can be found at Appendix A). This unit was chosen by the State Driving Coordinator and Manager Learning Systems as the PSTP competency which was most suitable to replace AFCs 1.04 and 2.03A which were the on-road driving modules being delivered at the time. AFC 1.04 and 2.03A are also the modules delivered to career firefighters as per their agreed skills mix in the *Operational Staff Agreement 2008*.

Note: *PUAVEH001A – Drive under operational conditions* is a competency covering general driving techniques, cabin drills and monitoring traffic and road conditions, and is not, as the name may suggest, Code 1 driving.

3.3 Off-road driver training

As stated, credits for training completed were transferred from AFC modules to PSTP units in July 2005. Initially the State Driving Coordinator and Manager Learning Systems identified that the PSTP unit *SRODRV002B – Drive a 4WD vehicle in difficult terrain* was a suitable replacement for the AFC module *2.03B – Drive vehicles off-road*.

Following a review of the off-road program and discussions with the Department of Sustainability and Environment (DSE) in late 2007, it was agreed that *FPIFGM3208A – Perform complex 4 x 4 operations* from the Forest Industry Training Package, was more suitable for purposes of both organisations, particularly as it included water crossings as an element (a copy of the competency can be found at Appendix B).

Prior to the review of the Forest Industry Training Package (completed in 2007) some competencies were recorded against another unit, *FPIFGM139A – Operate 4 x 4 vehicle in off-road conditions*, which was considered equivalent to the CFA off-road training program outcomes.

It should be noted that there are a number of off-road driving related competency units in a range of packages. During the review process an alternative unit, *TDTC2501A – Operate four wheel drive vehicles*, was piloted in the North East Area using an external provider.

3.4 Current driver training programs being delivered

The table below is a summary of the driver training programs delivered in each Area by provider, competency and duration:

Area	Provider	Course	Competency	Courses/year (students/course)	Duration
South West	No on-road courses offered				
	CITS	Drive a 4WD vehicle in difficult terrain	SRODRV002B	18 (8)	1 day
Barwon Corangamite	CITS	Drive under operational conditions	PUAVEH001A	12 (8)	1 night theory & 2 days practical both courses
	CITS	Drive a 4WD vehicle in difficult terrain	SRODRV002B	12 (8)	
Westernport	Staff and volunteers	Drive under operational conditions	PUAVEH001A	7–8 (up to 20)	2 nights theory & 1 day practical
	CITS	Drive a 4WD vehicle in difficult terrain	SRODRV002B	5 (8)	2 weekends
Gippsland	Staff and volunteers	Drive under operational conditions	PUAVEH001A	10 (8)	3 nights theory & 1 to 2 weekends practical
	Staff and volunteers	Perform complex 4 x 4 operations	FPIFGM3208A	1 (8)	2 weekends
North East		Drive under emergency conditions	Theory only	8 (many)	
	NISTC	Operate 4WD vehicles	TDTC2501A	16 (6)	1½ days
Yarra	Volunteer driver educators	Drive under operational conditions	PUAVEH001A	20 (16)	3 nights theory ½ day prac
	CITS	Drive a 4WD vehicle in difficult terrain	SRODRV002B	5 (16)	3 nights theory 2 days prac
Outer Metro North West	CITS & volunteer driver educators	Drive under operational conditions.	PUAVEH001A	10–12 (24)	1 night theory & 1 night assess, and 1 day prac assesses both courses
	CITS & volunteer driver educators	Drive a 4WD vehicle in difficult terrain	SRODRV002B	10–12 (24)	

Area	Provider	Course	Competency	Courses/year (students/course)	Duration
Midlands Wimmera	Instructor & volunteer driver educators	Drive under operational conditions	PUAVEH001A	10 (up to 20)	1 night theory & 1 hour prac
	Instructor & volunteer driver educators	Drive a 4WD vehicle in difficult terrain	SRODRV002B	10 (9)	1 night theory & 2 days prac
North West	CITS & Austlink	Drive under operational conditions	PUAVEH001A	12 (12)	1 day
	CITS & Austlink	Drive a 4WD vehicle in difficult terrain	SRODRV002B	5 (6)	2 days
Fiskville	Staff	Recruit driver training	PUAVEH001A	As required (up to 20)	7 days
	Staff	CFA Driver development course	Nil	6 (6)	2 days
	Staff	Off-road driving course	FPIFGM3208A	6 (6)	4 days
	Staff & DECA	CFA Driver Educator 2 course		2 (6)	20 days

As can be seen in the above table, there is inconsistency in what is being delivered and particularly the duration of similar courses, which raises some questions of consistency of learning's in relation to the final outcome of the training and the validity of the competencies provided.

Areas and/or providers are tending to modify courses to suit their, or the volunteers, needs and local conditions i.e. if sand, water crossings or rocks are not available at the training location they may be discussed during the practical component rather than actually practiced. It is apparent that making modifications to what should be a standard course is not confined to driver training, courses are routinely modified for a number of reasons which means that what are supposed to be standard courses are different depending on the local instructors modifications. Such modifications, where a student does not practically demonstrate a particular technique i.e. drive in sand, which CFA may see as being a necessary component of the training, should preclude them from gaining the competency for CFA purposes. However, this does not appear to be the case in some locations and an audit of the training delivered against competencies provided may need to be undertaken.

These inconsistencies appear to have arisen partly due to the lack of any formal organisational direction and the Area's need to provide some form of driver training based on the perceived risks both local and remote.

3.5 Other Emergency Service Organisations driver training

A number of other ESOs were contacted to ascertain the training requirements for their drivers, and the suitability of their courses for use in CFA. A summary of each organisations driver training follows:

3.5.1 Metropolitan Fire and Emergency Services Board

Drivers are required to complete and pass the *Emergency vehicle driver* course. This course is provided some time after the recruit course and assignment to a station.

Six members at a time attend the eight day course which is based on *PUAVEH001A – Drive under operational conditions*. All courses are conducted in-house using current vehicles allocated to the training facility. Training is done locally on a one instructor to three student's basis.

On successful completion of the course the driver is required to complete 15 hours of driving in the next year, after which time the driver is assessed by the shift driving instructor prior to being approved for Code1 driving. Skills maintenance is done on a 3–5 year basis by the shift driving instructor using a form documented process.

3.5.2 Department of Sustainability and Environment

Drivers are required to attend an informal on-road course (no accreditation or maintenance). They are also required to successfully complete *FPIFGM3208A – Perform complex 4 x 4 operations*, this course is provided internally in the outer metropolitan areas, but in remote parts of the state the course can be provided by a combination of internal and external providers. Skills maintenance assessments are conducted every five years during a practical skills test.

One of the significant issues DSE have in providing this course is finding appropriate locations and issues associated with the maintenance of the tracks due to damage from vehicles.

3.5.3 State Emergency Services

All drivers who take vehicles off-road are required to successfully complete a course aligned with *PUAVEH001A – Drive under operational conditions*. The course is provided by an external provider at various locations across the state and runs for two days with no skills maintenance provided.

3.5.4 Victoria Police

All drivers are required to successfully complete a driver training course based on their position and the type of vehicle they will be required to drive. Vehicles are classified and speed rated with each classification requiring a particular class of licence.

The first basic two week course which all drivers do is mapped from *PUAVEH001A – Drive under operational conditions*, a second two week course is then required for specialist positions where unlimited speed can be used. Off-road driver training is only provided to those members who have a 4 x 4 allocated to their position.

It is worth noting, as Victoria Police are seen by the coroner and WorkSafe as setting the standard for driver training, that the four day course was developed internally and is not specifically aligned with any particular national competency, however the course would meet all the performance criteria of *FPIFGM3208A – Perform complex 4 x 4 operations*, which is the competency CFA is using. Therefore, CFA could design its own course to meet its needs along similar lines if *FPIFGM3208A – Perform complex 4 x 4 operations* is found to be unsuitable.

All driver training is provided in-house with the majority being delivered at their driver training complex, with the exception of some of the practical sessions of the 4 x 4 course which is delivered at various locations. There is no skills maintenance program apart from drivers who have the unlimited speed qualification.

3.5.5 Rural Fire Service NSW

Drivers are only required to hold the appropriately endorsed state drivers licence; there is no requirement for any further driver training. Captains are required to endorse drivers to perform that role but there is no check to ensure this is done.

Two in-house courses are offered the first is *Rural fire driver* which covers the theory and practical components of off and on-road driving and some code 1 driving. The second course, *Crash free driving*, is a theory session on defensive driving and driver attitude.

3.5.6 Country Fire Service SA

Until recently CFS, similar to CFA and RFS, had no requirement for their drivers to attain any competencies. However, following a recent accident SafeWork (SA equivalent of WorkSafe) required CFS to provide appropriate training to members driving vehicles off-road.

A course was developed in-house, mapped from *TDTC2501A – Operate four wheel drive vehicles*, in conjunction with SafeWork and is compulsory for all off-road driving. The course *Safe off-road driver techniques* is delivered by an external provider using current tanker types that have been removed from the operational fleet. Pre course assignments on the theory components of the course are done by students at their own pace and the practical part of the courses is delivered over four hours in two or three locations around the state. CFS has no skills maintenance requirements in relation to driver training.

3.5.7 Summary other agencies driver training

Based on the information above, firstly it is apparent that no other volunteer based ESO is requiring their members to undertake significant driver training for both on- and off-road. Secondly, with the possible exception of the off-road course run by DSE, the driver training provided is either too onerous, lacks the flexibility required to be of value to CFA, or is not robust enough for the likely state-wide risks faced by drivers of CFA vehicles.

3.6 WorkSafe legislation and expectations

OH&S legislation places certain duties on employers with regard to their employees, in the case of CFA this applies to all members; both volunteers and staff. In part these duties are to eliminate or reduce risks to health and safety, provide and maintain a safe working environment and to provide information, training and supervision to enable personnel to perform their work safely and without risk to health (a copy of the relevant section of the OH&S legislation is available at Appendix C).

Advice from WorkSafe is that their expectation is that all drivers receive appropriate training to cover all risks they are likely to encounter,. This would include the issue of drivers on strike teams driving in different terrain to their home location. WorkSafe's expectation is that all training is to "best practice" principles and Victoria Police would be seen as the standard.

3.7 Coroners expectations

A number of coroners have made recommendations in relation to driver training, some of those recommendations are:

- As a result of the coronal inquiry into the fatality involving the Wangaratta tanker on 26 July 1991, the coroner recommended "that the CFA should give as much impetus as possible to the plans for the training and accreditation of its part-time volunteer drivers as can reasonably be undertaken, with the view to ensuring that in future all CFA drivers will have the same degree of training as a permanent driver".
- Following a fatality involving an ambulance at Myrtleford on 28 May 1998, the coroner recommended in part "ongoing and regular driver training for drivers of emergency vehicles. The issue as to whether there should be a uniform driver training involving the driver training conducted by the Victoria Police Department should be explored".
- On 26 February 2003, a DSE firefighter died during the North East fires in the Mt Selwyn area. The coroner recommended that "the training of employees in both 4WDs and in driving vehicles across water hazards be reassessed". "Firefighters are often involved in dangerous activities in mountainous terrain where water crossings would not be uncommon and to have the ability to assess and judge the dynamics of flowing water would be a desirable skill".
- At the Australian Fire Services Emergency Vehicle Driver Training Symposium at the Melbourne Convention Centre in November 2007, State Coroner Graeme Johnstone stated that his expectation for driver training is that the training would be delivered in similar vehicle to the one the student is expected to drive at their work place.

Various coroners have stated on a number of occasions that they consider Victoria Police to be the benchmark in relation to driver training.

Issues for decision

1 Should CFA train both staff and volunteers to the same competency and to the same level?

For:

- Both staff and volunteers would be trained the same for the same vehicle and conditions.
- Both groups would attend the same training sessions.

Against:

- Staff are paid to attend training, it would be impractical to pay volunteers.
- Volunteers are not able to commit the same time as staff to attend training.

Preferred position

- A In integrated stations both staff and volunteers that are required to use the same vehicles are trained in the same competency to the same standard.
- B Volunteers at other stations are trained in the same competency to a level commensurate to the brigade's risks and environment.

2 Is it suitable to provide off-road driver training in RVs or should all training be in the similar vehicles to what the student will drive in their brigade?

For:

- RVs may be easier to obtain.
- RVs would cause less damage to training area.
- RVs would be cheaper to run.
- RVs would be easier to drive.
- RVs can accommodate more students than most tankers.

Against:

- Students not taught in the vehicle they will be required to drive and therefore, do not learn the issues of size, weight, water surge etc.
- Students could become over confident driving RVs and put themselves and others at risk in a tanker.

Preferred position

Where possible driver training should be delivered in like vehicles to what the student will be expected to drive in their home location. RVs can be used for the initial part of the training to develop skills and build confidence.

4 Discussion

4.1 Appropriateness of current driver training

As discussed, due to a lack of any formal driver training direction, a number of different courses are being provided across the state on an ad hoc basis. These courses are provided by a range of instructors at various locations, which may or may not be suitable, using varying standards of delivery and assessment. Whilst this may be expedient for the purposes of flexibility and providing local training for local needs, it is uncertain whether or not this situation would be acceptable to either Work Cover and/or the coroner.

Some Areas appear to be providing a quite reasonable standard of training. However, it is difficult to judge without a formal organisational standard to assess against. The standard should describe the competency most appropriate for CFA's purposes, it should include the elements and performance criteria that are required to eliminate or reduce the risks drivers of CFA vehicles may be exposed to and Areas must be required to deliver training and assessment to that standard. Currently as an organisational standard is not available, Areas or providers are modifying existing competencies to suit their own purposes, which leads to inconsistencies and gaps in the competence of the drivers across CFA.

Therefore, whilst the competency being delivered may be appropriate, the inconsistency in delivery and assessment of the package may lead to the training not being appropriate to all the risks faced by drivers of CFA vehicles across the state.

4.2 Preferred driver training

4.2.1 On-road

PUAVEH001A – Drive under operational conditions has been assessed by the State Driving Coordinator and Manager Learning Systems as being the most appropriate to CFA's needs and the risks faced by drivers of CFA vehicles. This competency appears to be what is currently being delivered in all locations across the state, although there may be some variations in the elements that are taught and assessed.

A *skills PAK* (endorsed assessment tool) for the competency will be issued which will stipulate the key elements and the performance criteria which must be delivered and assessed in order to gain the competency. Members will be required to complete the whole competency, with the training and assessment being done in their local conditions.

From this process they will gain the competency *PUAVEH001A – Drive under operational conditions*. They will then need to hold the OICs endorsement to enable them to drive in their local conditions e.g. members who live in rural areas would have the same competency as members in the metropolitan area but would only be trained, assessed and endorsed in light traffic conditions with few if any traffic lights, pedestrian crossings, roundabouts and speed humps, therefore, if the member is transferred to a brigade in a large city or the metropolitan area they will need to be found competent and endorsed by the OIC of the new brigade before being able to drive in those conditions.

4.2.2 Off-road

As indicated previously there are a number of different off-road competencies being delivered, with variations on the elements taught and assessed, this is due primarily to the training being delivered for the local conditions and to a lesser degree a lack of corporate direction. To ensure consistency a *skills PAK* (endorsed assessment tool) will be provided for the competency which will stipulate the key elements and their performance criteria which must be covered as a minimum to gain the competency.

However, because of the large number of risks across the state and the inability to find local locations that would enable suitable driver training to be delivered to address those risks appropriately, it may be desirable to have different categories in the off-road competency. Rather than expecting all drivers to be trained for all risks, which would be a huge task, it would be simpler to train all drivers for a set of core performance criteria and their local risks (what ever they may be) as a base level (a CFA competency) then the other performance criteria could be covered later at another location to complete the full national competency *FPIFGM3208A – Perform complex 4 x 4 operations*.

The *skills PAK* for *FPIFGM3208A – Perform complex 4 x 4 operations* has 10 performance criteria in the practical assessment guide which are:

- 1 Demonstrate vehicle manoeuvring skills in accordance with CFA policy and OH&S guidelines.
- 2 Demonstrate correct procedures for negotiating cross slopes.
- 3 Demonstrate stall recovery techniques.
- 4 Demonstrate a park brake and hand throttle start as appropriate.
- 5 Demonstrate correct procedures for negotiating difficult terrain.
- 6 Demonstrate the correct procedures for negotiating steep ascents and descents.
- 7 Demonstrate the correct procedures for negotiating water crossings.
- 8 Demonstrate correct procedures for negotiating mud.
- 9 Demonstrate correct procedures for negotiating sand.
- 10 Demonstrate correct procedures for negotiating rocky terrain.

Of these performance criteria, the first five could be seen as the core criteria, so all off-road drivers would be required to complete the core criteria as a minimum, this would give the member a CFA (local) competency. The core criteria plus any one, two, three or four of the remaining criteria, depending which one(s) can be done locally, is still a CFA competency, with training records noting the particular criteria covered. When all 10 criteria are covered the driver will gain the full national competency. This would then provide the member the competence to drive in other areas with differing risks from their local area i.e. drive in strike teams. As per the SOPs, the OIC is still required to endorse the member to drive CFA vehicles.

Issues for decision

3 Should all drivers of CFA vehicles be required to hold an appropriate competency?

For:

- CFA has an obligation under OH&S legislation to provide training to its members for risks they face in performing their role.
- All CFA members would be more confident of their safety whilst driving in CFA vehicles.
- All drivers would be trained to a similar level.

Against:

- Significant cost to CFA for unknown value.
- Some drivers may not wish to gain the competency, therefore, may be lost as drivers or members.
- Many drivers have been driving for a significant time and should not be required to gain the competency.

Preferred position

All drivers of CFA vehicles will be required to gain the appropriate competency.

4 Is providing training and assessment of the off-road competency at two levels (CFA and national) appropriate or should all drivers be required to be competent for all risks?

For:

- Training assessment and challenge testing for CFA competency can be done locally.
- Less training for drivers who do not want to attend incidents away from local area for CFA competency.
- Less training required on a state wide basis therefore, manpower and cost savings as well as completing project earlier for CFA competency.

Against:

- Not all drivers will be trained to the same level/ standard if CFA and national competencies are used.
- Greater cost to train all drivers for national competency.
- May cause a shortage of drivers during campaign fires if majority only have CFA competency.

Preferred position

Provide training and assessment of the off-road competency to two levels CFA (local) and national.

4.3 Process for obtaining new competency

4.3.1 Drivers with current competency

Although there may be concerns about the standard of some of the driver training delivered in the past, it would be too difficult and probably inappropriate to expect those drivers who currently hold a competency to be reassessed in any way, except where a review of the delivery of the training delivered by any particular provider raises concerns regarding adequacy. Therefore, those members who hold a current competency in any of those listed below should have their competency confirmed to drive either on- or off-road or both depending on the competency they hold.

With the exception of 1.04, 2.03A and 2.03B – members with these competencies are required to have a combination of 1.04 plus 2.03A along with the driving legislation and policy *skills PAK* for on-road and 1.04 plus 2.03B for off-road. Further explanation of the process can be seen from the flow chart at 4.3.5.

On-road	
TDTC197B	Drive vehicles
PUAVEH001A	Drive vehicles under operational conditions
1.04	Driving vehicles 1
2.03A	Drive vehicles on road (legislation)
Off-road	
SRODRV002B	Drive 4WD vehicle in difficult terrain
2.03B	Drive vehicles off road
TDTC2501A	Operate 4WD vehicle
FPIFGM139A	Operate 4x4 vehicle off road
FPIFGM3208A	Perform complex 4x4 operations

Issue for decision

5 If a two level system of training and assessment is appropriate for the off-road competency, should all drivers with current competencies be confirmed as being qualified for the CFA competency only, not the national competency?

For:

- It is more than likely that most drivers did not cover all 10 performance criteria from the national competency in their training.
- It will not be too difficult to challenge test drivers to cover the missing criteria so they will gain the national competency.
- CFA will know when drivers gain the national competency that they are all trained to the same performance criteria.

Against:

- Drivers who have been driving for many years and have driven on several strike teams will have driven in many different conditions, and therefore, should be granted the national competency.
- If the majority of drivers do not go on to complete the national competency there could be a shortage of strike team drivers over a long fire season.

Preferred position

All drivers with current competencies be confirmed as having the CFA (local) competency unless they are able to provide evidence that they have been trained and assessed against all 10 performance criteria of the national competency.

4.3.2 Drivers without current competency

Any members who currently drive CFA vehicles but do not hold one of the competencies above can be challenge tested and, if deemed competent, be awarded the appropriate competency.

Challenge testing is one of three accepted methods of obtaining a competency, the others being successfully attending a training and assessment course and providing evidence using the RPL/RCC process. Challenge testing is a process by which a member, due to extensive experience, on the job learning or undocumented learning, can be assessed or measured against the elements and performance criteria in the *skills PAK* for the competency. This enables those members who are deemed competent to gain the competency in a few hours rather than several days.

The on-road challenge test will be as follows.

Theory component (1–1½ hrs):

- Closed book written assessment on the Driving Legislation and Policy *skills PAKs* parts A and B.

Practical component (1½–2 hrs):

- Inspection and vehicle check.
- Cabin drill.
- Pre drive drill.
- Drive in local area.
- Reversing.
- Parking.

The off-road challenge test will be as follows.

Theory component (1hr):

- Self paced open book written assignment done by the member at home.

Practical component (up to 2 hrs depending on travel times to features):

- Assessment against core performance criteria (CFA competency).
- Assessment against additional performance criteria features available locally (CFA competency) when the member is able to be assessed against all 10 criteria they gain the national competency.

Further explanation of the process can be seen from the flow chart at 4.3.5.

4.3.3 RPL/RCC Process

Recognition of Prior Learning (RPL)/Recognition of Current Competency (RCC) is a process where evidence is collected about a member to confirm that the member has acquired the knowledge and skills that is relevant to the competency for which they are claiming RPL/RCC. Evidence can take many forms and include:

- demonstration of on-the-job skills'
- demonstration of off-the-job skills;
- formal training courses;
- formal qualifications; and
- life experiences.

The evidence is based, generally, on the member being able to demonstrate that they can successfully meet the learning outcomes or skills that have been identified in the relevant competency, irrespective of how those skills may have been obtained

Using the RPL/RCC procedure is not an easy way to prove current competencies and is not given for time-serving or experience. It is an evaluation of the specific learning the member has and the relevance of that learning to the particular competency.

Any member that undertakes the RPL/RCC process needs to be committed to supporting their case by locating and providing suitable evidence and documentation. This requires significant effort and the time commitment should not be underestimated. The time and effort taken in attempting to provide suitable evidence and documentation for an RPL/RCC process for any of the driver training competencies would more than likely be greater than simply participating in the challenge test. It is also unlikely that members will have any formal documentation to line up against the performance criteria of the driving competencies.

4.3.4 New drivers and drivers deemed not yet competent

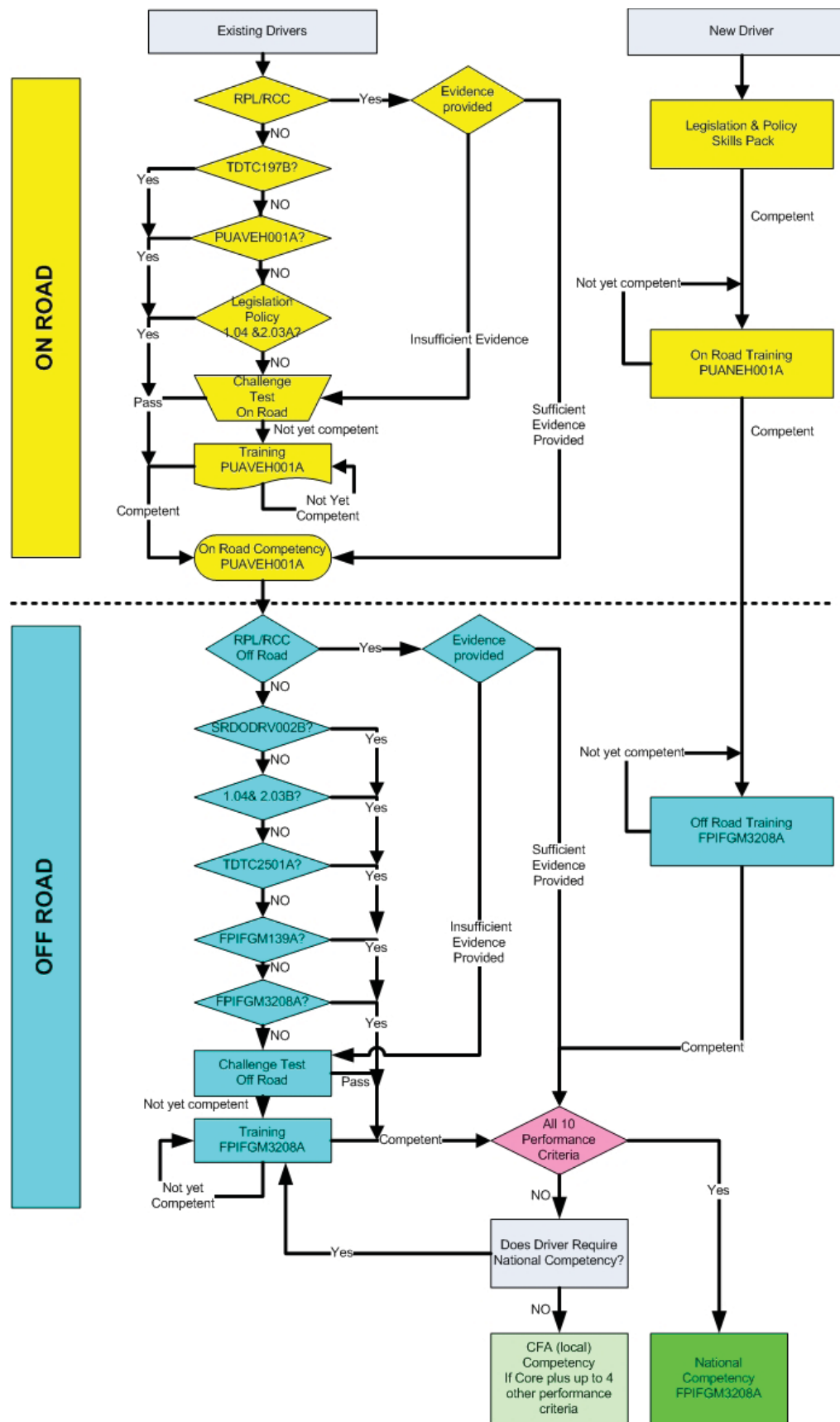
Members who do not hold a current competency to drive CFA vehicles, or are deemed not yet competent through either a challenge test or the RPL/RCC process, and wish to drive CFA vehicles, will be required to attend either or both the appropriate driver training courses; *PUAVEH001A – Drive under operational conditions* for on-road driving, and/or *FPIFGM3208A – Perform complex 4 x 4 operations* for off-road.

The drive CFA vehicles matrix (Appendix D) attached to this document shows the minimum requirements to drive CFA vehicles. It is intended that the on-road competency is a pre-requisite to gaining the off-road competency, except where the OIC of the brigade and or the Operations Manager have approved a member to gain the off-road competency prior to the on-road competency, if deemed operationally necessary or appropriate.

The member will be required to complete the legislation and policy skills pack parts A and B prior to the off-road course and is required to gain the on-road competency within three years of gaining the off-road competency

4.3.5 Process flow chart

The process for gaining either the new on-road or off-road competencies is illustrated in the flow chart below.



4.4 Process for OICs endorsement

Anecdotal evidence indicates that a significant number of OICs of brigades are unaware of the SOPs which requires them to endorse drivers of CFA vehicles. Further, a number of OICs that are aware of the requirement are not comfortable with telling friends, neighbours and relatives that they will not be endorsed to drive a CFA vehicle. CFA should provide written advice to all OICs of the requirements of the SOPs along with advice on implementing them and a reminder that any disputed in relation to the determination of the OICs shall be resolved by the Operations Manager. To assist OICs through the thought process for endorsements, a draft Driver endorsement check list is attached (Appendix E).

SOP 12.03 requires the OIC of a brigade to “endorse any person under their control to drive and operate any CFA vehicle”.

In implementing the SOP, the OIC of a brigade after due consideration, which would include the person holding the appropriately endorsed drivers licence for the vehicle, and being aware of the driving competence of the person, shall endorse that person to drive the appropriate CFA vehicle on a vehicle by vehicle basis.

Having endorsed a person to drive CFA vehicles the OIC will ensure that a register of such endorsed persons is kept by the brigade, noting what vehicle(s) that person is endorsed to drive. The OIC will on a regular basis ensure the register is current, and the Chief Officer will verify this as part of the annual S29 inspection process and record the endorsement on the appropriate database.

SOP 12.04 requires that OIC of brigades “shall determine which members are permitted to drive a CFA vehicle Code 1. This endorsement shall be based on competency, endorsement and demonstrated aptitude”.

The process for endorsement by the OIC of the brigade to drive a CFA vehicle Code 1 will be as per the process above.

4.5 Process for skills maintenance

For the purposes of ensuring all drivers maintain their competency, there is some consistency with other competencies and to enable an audit function of current competent drivers, a skills maintenance program is a requirement for both on- and off-road competencies.

The adoption of a uniform approach to skills maintenance will provide an opportunity to validate the competencies already awarded. In addition, the brigade OIC (with the Brigade Management Team) has a responsibility to monitor the skills of their members and to task them to activities appropriately.

All drivers will be required to drive their brigade vehicle(s) in situations consistent with the competency they hold at least once every six months for at least thirty minutes. The driving can be under operational conditions, the weekly run, driver training, group exercises or any other driving but must be consistent with their competency. It may be appropriate for the Brigade Management Team to design a route in the brigade district which has the appropriate features for both on- and off-road skills (available locally) which drivers can use for their skills maintenance drive. In order to record this process each driver will be required to maintain a log of all driving they undertake.

Additional to the skills maintenance driving above, all drivers will be challenge tested as per 4.3.2 above every five years.

Issues for decision

6 Should there be a skills maintenance requirement for driving competencies?

For:

- For the safety of CFA members and the public, skills maintenance should be required.
- Skills maintenance should be required to ensure all drivers are up to an appropriate standard.
- There is a skills maintenance requirement with other key competencies.

Against:

- There is no skills maintenance for a drivers licence.
- Cost associated with skills maintenance.
- Risk of vehicle damage in 4 x 4 operations.
- Members are driving vehicles all the time and therefore, maintain their skills.

Preferred position

Skills maintenance is required for driver training competencies.

7 If so what skills maintenance is required?

5 Issues that impact on implementation of a driver training strategy

5.1 Consultation with VFBV Association/UFU

The volunteer charter requires the CFA to commit to consult with volunteers about all matters which might reasonably be expected to affect volunteers.

CFA is a volunteer based organisation and therefore, relies on its approximately 60,000 volunteers to provide the bulk of its emergency response. This is particularly relevant in the more remote areas of the state – any decision to mandate a particular competency or training has a significant impact both organisationally and on the volunteers themselves.

Many of CFA's volunteers currently drive heavy vehicles and many more drive vehicles in difficult terrain, it may be difficult to convince those members that they will be required to spend up to two days to obtain an on-road driving competency and up to four days for an off-road competency. This may be even harder for the volunteers to accept in the current economic climate and ongoing drought conditions. Many may not be able to justify this requirement, particularly if they are being asked to train for risks that do not exist in their home location.

Therefore, it is likely the Association will also have some concerns about any additional requirement for training; particularly in relation to driving which many of their members would already feel they are appropriately skilled. In order for any requirement for driver training to be accepted there will need to be extensive consultation and negotiation before an agreed position can be reached. However, driving CFA vehicles, some times under hazardous conditions, should be seen simply as another minimum skill required by those members who wish to carry out the task.

In order for a driver training package to be agreed to with the Association it will need to be flexible in how it is delivered i.e. nights, weekends and or mid week, some face to face teaching and some self paced learning at home. It should also be able to be delivered as close as possible to the member's home location. However, it must cover all the elements needed to mitigate or eliminate the risks associated with driving CFA vehicles both locally and state-wide.

CFA is also required to consult with the UFU under various enterprise agreements.

Currently AFC 1.04 and 2.03A are the modules (competencies) delivered to career firefighters as per the agreed skills mix in the *Operational Staff Agreement 2008*, these two competencies are for on-road driving. There is no agreed competency for off-road driving in the *Operational Staff Agreement 2008*, nor at present is there any requirement for staff to do off-road driver training. If however a change in that position was to occur, consultation will need to be undertaken with the UFU.

5.2 Instructor numbers

5.2.1 Internal providers

Currently CFA has a total of 260 personnel qualified to deliver driver training, this include station based staff, some wildfire instructors, field staff and volunteer driving instructors. Of the 260 driver educators, almost half are from Regions 7, 8, 13 and 14. A scan of the list of driver educator also shows that, for various reasons, somewhere in the vicinity of 20% to 30% may no longer be available as driver educators.

If all skills tests and driver training were to be delivered by a combination of appropriately qualified staff and volunteers, a significant number of people will need to be qualified. It is likely that about 15–20 driver educators will be needed per region. The regions in the outer metropolitan area are well under way with driver training and have significant numbers already trained particularly in the on-road competency. As they also have access to larger numbers of staff and volunteers than the more remote regions they will need less driver educators trained. Conversely, due to the smaller numbers of staff and volunteers in the more remote regions, it is unlikely that there will be 15–20 people willing to do the necessary training to become a driver educator and also find the time to deliver the driver training and carry out challenge tests over a number of years. As it is more than likely that there will be a number of Regions where an appropriate number of driver educators will not be available, the training may have to be delivered by members from other Regions or external providers.

The total number of driver educators needed to challenge test, and train adequate numbers of drivers in both on and off-road skills is in the range of 350 to 400 across the state, this would mean an increase of about 250 to 300 driver educators.

Currently, the driver educator course provided at Fiskville takes 20 days to complete, on top of this, the driver educator is required to have provide training (3 days) and CFA assessor (5 days) competencies as a prerequisite to the driver educator course. A decision was taken in 1990 in the heavy vehicle driver training industry that all driver trainers would hold *Certificate 3 – Road transport driver trainer (car)*, this certificate is the basis for the current driver educator course. The standard is about to be changed to Certificate 4 however CFA has not yet seen the new standard and therefore, is unaware of the content. This may be the opportunity to rationalise the number of competencies needed for the driver educator course and make it more suitable for CFA purposes.

Fiskville has recently lost one of its two driving instructors to retirement and the second will shortly be finishing his secondment and returning to his substantive position. This will leave Fiskville without a driving instructor and will therefore, require the appointment of at least two new instructors and if a driver training strategy is adopted they will require up to six full time driving instructors.

5.2.2 External providers

Currently there are at least three external providers delivering various aspects of the driver training being delivered by Areas, at an average cost of about \$100 p/hour, p/instructor. This equates to approximately \$100 p/student for on-road training and approximately \$500 p/student for off-road training. As it is highly unlikely that every region will be able to access sufficient volunteers and staff to deliver all the challenge tests and training associated with this strategy, it is probable that some, if not most, will need to be provided by external providers. At least two of the current providers have been able to access government training funds which has significantly subsidised the cost of training to some areas. In the case of the North East Area, the training has been delivered on a one for one basis i.e. pay for one get one free. If this government funding was to continue it would significantly reduce the cost of the overall program to CFA.

If a driver training strategy was implemented, the work load associated with its delivery would necessitate at least one additional staff member per Area, the appointee being the driver training coordinator and possibly an additional administrative assistant for data entry to assist them and the MTD.

5.3 Volunteer availability

Due to a number of factors, particularly the current drought and the prevailing economic conditions, it will be difficult for many volunteers to be able to find the time to attend driver training courses that require several days to complete. This may be more of an issue in the remote regions than in the outer metropolitan regions and particularly in relation to off-road driver training which can take up to four days, where as on-road driver training may take only two days.

Complicating this is the fact that it would also be difficult to be able to provide training year-round due the nature of off-road driver training in particular i.e. the training location would need to be relatively dry so it was not too dangerous or cause too much damage to the environment. In fact, depending on the location where the training is carried out,

it is likely to be limited to only four to six months a year during late spring, summer and early autumn. Unfortunately, this is also the period when many of volunteers are busy with farming activities and attending fires.

For volunteers to be able to access the driver training, it will need to be delivered in a variety of flexible packages and in locations as close to their brigades as possible – even then, there may be a number of members unable to find the time to complete the training.

5.4 Appropriate training locations

Suitable locations to deliver the on-road driver training should not be too difficult to find across the state as few special features are required. However, it is unlikely that any one location will have all the features needed to address the various risks which may be encountered by drivers of CFA vehicles on a state-wide basis.

It may, however, be possible to find suitable off-road driver training areas which will have the features of risk applicable to the local area, and these area will be adjacent to the brigades. A number of Areas are using quarry sites for their driver training, these sites are particularly suitable as little damage is caused to the environment and they are generally of a size suitable to use tankers.

Off-road driving sites on public land or in private bush are usually difficult to gain access to as heavy 4 x 4 vehicles such as tankers cause too much damage to the tracks particularly with constant use. DSE have difficulty in obtaining use of tracks for driver training because of the maintenance issues, so they constantly change locations in an attempt to keep damage to a minimum when using heavy tankers.

Fiskville has developed an off-road driver training facility (photos attached Appendix F) that addresses the vast majority of risks that may be encountered across the state. The only limitation is that features are limited in size and therefore, more suitable for RVs than tankers, but are quite suitable to teach the principals required for the off-road driver training competency. The students are then told to practise the skills in their local area using the local appliance. The course was built at a cost of about \$50–60k (the costs were kept down as the work was done in conjunction with other works at Fiskville and most of the raw material needed was available on site) the full cost would very dependant on what raw materials were needed and where they had to be delivered from, but an indicative cost would be around \$120k. The facility covers an area of approximately five hectares and could be duplicated in a number of locations around the state.

Gippsland, North West and South West Areas are looking at developing a similar driver training course at each of their training complexes. Areas which have accessed quarries or other locations for their driver training may be able to build some of the features they are missing in the local area so they can deliver training and assessment across all the features required for the national competency.

Other Emergency Service Organisations including Victoria Police, SES, DSE, Ambulance Victoria and the Navy have either used or expressed interest in using the existing facility at Fiskville for their driver training. If CFA developed further facilities across the state there is likely to be interest from other agencies to use the facilities which could help in funding maintenance of the props into the future. Nissan Australia has also used the facilities at Fiskville on two occasions to launch new vehicles, hosting a number of fleet managers and executives from their dealerships.

Currently the secondary entrance to Fiskville is used to provide some of the on-road driver training particularly for the recruit courses, as well as being used for vehicle testing prior to new vehicles being introduced into the fleet. However, the current primary entrance to Fiskville, through the archway, will soon be closed off to traffic, resulting in the secondary entrance becoming the primary entrance and will no longer be available for driver training. Therefore, the training will need to be provided at another location or a new area developed at Fiskville. Currently the proposal is to seal the air strip at a cost of approximately \$750,000 which it is hoped can be funded as part of this project.

Any locations used for driver training should be subject to a full hazard assessment, documenting the hazards, risks and control measures to be taken for each identified risk activity (sample forms are attached as Appendix G).

Issue for decision

8 Should CFA develop a number of full or part off-road driver training facilities similar to Fiskville's across the state?

For:

- All drivers could be trained under similar conditions.
- Drivers would not have to travel too far for training/ skills maintenance.

Against:

- Too expensive, use local natural features.
- Features may be too small for use by tankers.

Preferred position

Provide full or part facilities around the state so that in conjunction with natural features all 10 performance criteria for off-road competencies can be covered within two hours travel from any brigade.

5.5 Availability of appliances

The majority of other ESOs contacted do provide their driver training in similar vehicles to those being used by the students in their local area. This is achieved by using the actual vehicle from the local area or a similar vehicle which has been removed from service specifically for the purposes of driver training.

Where ever possible, driver training should be delivered in similar vehicles to that which the student will be driving in their home location, this should not be an issue where the training is delivered close to the brigade. However, where it is necessary to deliver specialist training for a particular risks type which is not available locally, and the training location is remote to the brigade, it may be difficult to provide appropriate appliances. In cases where a similar vehicle is not available it may be appropriate for the training to be delivered in an RV.

Alternatively, over the next few years CFA will have early models of the Hino 3.2, 3.4 and Isuzu 2.2 tankers as well as Hino T3, T4 and Ford/Mazda T2 pumpers being replaced. A number of these vehicles could be retained and allocated for driver training purposes only, this would ensure driver training was delivered in similar vehicles to those in most brigade locations. Brigades that have or will get the next generation pumper with traction control and hydraulic reactors would need a top up on those skills at their home location.

5.6 Record keeping

All training records are kept in the TRAIN database, which currently does not have all the features that may be required if this strategy is implemented.

Therefore, TRAIN would need to be modified, or if that is not practical, a new database would need to be developed which interfaces fully with RMS, IMS and FIRS and include the additional information required for this project. A range of data will need to be collected such as: data will need to be maintained for driver skills maintenance records from the drivers log book, including picking up data from IMS on strike team membership and the role carried out; FIRS information on the driver of a vehicle; a record of the individuals targeted for driver training; Brigade OIC's endorsement for drivers records; and possibly also maintain a vehicle accident database. The current vehicle log book will need to be modified to include data for skills maintenance and also the driver fatigue management legislation.

5.7 Costs

Costs for this project will be significant and could be the major issue to impact on it.

The costs will vary significantly depending on a number of variables such as:

- how many members are to be challenge tested;
- how many members need to be trained;
- where the training is delivered;
- will CFA develop driver training facilities across the state;
- to what level of competence the training is delivered and assessed;
- will the training be delivered by existing staff and volunteers or external providers or a combination of both;

- what vehicles are used;
- how long each training course takes; and
- what the timeframes are for completion of the initial delivery of training.

6 Timeframe for implementation of new driver training program

Due to the complexity of the issues associated with the implementation of a mandatory driver training programme, it is likely that it will take up to 10 years for CFA to be in a position where all current drivers have the appropriate competencies.

7 Numbers to train

Numbers to be trained (gap) requiring either the on-road or off-road competencies over the next 10 years have been supplied by regions and are shown below:

Region	Drive under operational conditions (PUAVEH001A)			Perform complex 4 x 4 operations (FPIFGM3208A)		
	Requirement	Currently trained	Gap	Requirement	Currently trained	Gap
2	434	399	35	365	165	200
4	337	7	330	363	133	230
5	806	36	770	891	291	660
6	828	58	700	384	34	350
7	568	238	330	541	111	430
8	1107	1067	40	567	367	200
9	539	109	430	410	20	390
10	624	84	540	486	56	430
11	523	23	500	515	15	500
12	464	64	400	271	71	200
13	1048	698	350	514	354	160
14	918	668	250	593	393	200
15	942	592	350	523	123	400
16	836	396	440	604	154	450
17	912	462	450	1006	26	980
18	451	121	330	342	12	330
20	401	81	320	366	6	360
22	850	50	800	439	39	400
23	410	40	370	414	44	370
24	616	46	570	363	43	320
Totals:	13,859	5239	8620	10,016	2456	7560

Note: Brigade driver training targets for both on- and off-road must be included in a brigade's operational skills profile and reviewed annually through the S29 inspection program.

Appendix A

PUAVEH001A – Drive under operational conditions competency

Drive vehicles under operational conditions

UNIT NAME Drive vehicles under operational conditions

UNIT CODE PUAVEH001A

UNIT DESCRIPTOR This unit covers the competency to drive vehicles safely, including the systematic, safe and efficient control of all vehicles functions and effective management of hazardous situations under operational conditions.

ELEMENT	PERFORMANCE CRITERIA
<p>1. Prepare vehicle for operational response</p>	<ol style="list-style-type: none"> 1. The vehicle is selected to meet operational requirements and is suitable to use in the terrain 2. Preliminary check of the vehicle is completed to ensure it is serviceable 3. Equipment and accessories are checked to ensure they are available and serviceable 4. Cabin drill and start up checks are completed in accordance with operational standards 5. Engine is started in accordance with manufacturer's specifications 6. Audible and visual warning systems are checked to ensure that they are all operational
<p>2. Drive the vehicle</p>	<ol style="list-style-type: none"> 1. Vehicle is prepared for, and safely operated in terrain suitable to the vehicle 2. Vehicles and/or trailers are operated and positioned in accordance with traffic regulations and organisation's policies and procedures and to ensure safe and efficient operation 3. Low risk driving techniques are used which minimise the likelihood of injury to persons or damage to equipment or property and in accordance with the organisation's policies and procedures
<p>3. Monitor traffic, road and terrain under operational conditions</p>	<ol style="list-style-type: none"> 1. Vehicle movement is controlled in response to external conditions to ensure safety of persons 2. The most efficient route of travel is taken through monitoring factors likely to cause delays or route deviations 3. Traffic and surface conditions are consistently monitored and acted upon to enable safe operation and ensure no injury to people or damage to property, equipment, loads and facilities

Drive vehicles under operational conditions

RANGE STATEMENT

This unit relates to driving vehicles while responding to, or at emergency operations and includes the use of audible visual warning devices. Vehicles may be responding or operating on urban or rural roads, four wheel drive tracks or private roads, or cross country. Drivers will be required to have the appropriate driving licence.

Vehicles may include	<ul style="list-style-type: none"> all types of operational vehicles tankers troop carrier rescue vehicles buses bulk water carrier all terrain vehicles pumpers aerial appliances communication vehicles command /control vehicles
Operational conditions may include	<ul style="list-style-type: none"> non-emergency driving emergency response driving off-road driving hazardous environmental conditions driving in special environments (eg on actual airport movement areas) prevailing weather time of day/night visibility recovery
Considerations may include	<ul style="list-style-type: none"> procedures traffic conditions levels of emergency response adverse weather traffic regulations warning devices adverse terrain type of vehicle adverse surfaces
Cabin drill may include	<ul style="list-style-type: none"> adjustment of seats seatbelts mirrors and steering radio on all crew seated/restrained dash layout gauges warning lights
Start-up check may include	<ul style="list-style-type: none"> fuel coolant oil pump water equipment/locker security visual inspection of vehicle operation of emergency warning devices (lights/sirens) crew intercom physical check or scan of gauges



Drive vehicles under operational conditions

Instruments/gauges may include	warning lights tachometer temperature electrical charging systems indicators (high beam turn signals parking brakes) speedometer oil pressure brake warning lights audible warning devices water tank level indicator
Relevant legislation and procedures may include	traffic regulations organisation policy and procedures accident procedures emergency parking possession of appropriate licence
Manufacturer's specifications may include	engine characteristics systems warning functions radius of turning circle safety procedures horsepower rating maximum vehicle weight fuel capacity for range clearance height engagement procedures no-spin locking differential anti-lock braking systems
Traffic conditions may include	parking traffic pattern and density known peak traffic periods and community functions and events effect of weather on roads road surface visibility

EVIDENCE GUIDE

Critical aspects of evidence	It is essential for this unit that competence be demonstrated in a practical demonstration of driving skills. Maintaining personal safety, safety awareness and awareness of traffic conditions and other road users is critical
Interdependent assessment of units	Pre-requisite units: Nil Co-requisite units: Nil
Underpinning knowledge	ancillary equipment appreciation of automotive systems emergency vehicle requirements and regulations knowledge of emergency vehicle inspection procedures knowledge of equipment and accessories local area knowledge traffic legislation traffic rules and regulations vehicle operating procedures

Drive vehicles under operational conditions

Underpinning skills	low risk driving techniques monitor and anticipate traffic hazard
Resource implications	Assessment of this competency will require access to a relevant vehicle
Consistency in performance	Evidence should be gathered over a period of time in a range of actual or simulated workplace environments
Context of assessment	Competency must be demonstrated in a simulated operational situation under varying conditions

KEY COMPETENCIES

Collect, Analyse & Organise Information	Communicate Ideas & Information	Plan & Organise Activities	Work with Others & in Teams	Use Mathematical Ideas & Techniques	Solve Problems	Use Technology
1	1	1	1	1	2	1

Appendix B

FPIFGM3208A – Perform complex 4 x 4 operations competency



FPIFGM3208A: Perform complex 4x4 operations

Description

This unit specifies the outcomes required to perform complex 4x4 operations including operation over rugged terrain and water crossings. Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

Application Of Unit

This unit supports the attainment of skills and knowledge required for competent workplace performance in forest and forest products operations of all sizes. The unit applies to a forest environment and involves application of skills and knowledge at a tradesperson level. These skills and knowledge are to be used within the scope of the person's job and authority

Unit Sector

Forest Growing and Management

Performance criteria

Element	Performance criteria
1. Prepare for 4x4 operations	1.1 Applicable Occupational Health and Safety (OHS), legislative and organisational requirements relevant to performing complex 4x4 operations are identified and complied with 1.2 Type of water crossings and terrain are identified and assessed for safe operating conditions 1.3 Vehicle is selected appropriate to conditions and checked for operational effectiveness in accordance with manufacturer's specifications 1.4 4x4 activities are planned in accordance with anticipated conditions 1.5 Hazards and risks associated with operations and surfaces are assessed in accordance with capability of operator and vehicle 1.6 Communication with others is established and maintained in accordance with OHS requirements
2. Negotiate water crossing	2.1 Entry and exit points for crossing are established and selected for current flow in accordance with risk assessment 2.2 Depth of water at intended crossing point is checked against indicators or activities 2.3 Gear/ratio for completion of crossing is selected without the need to change 2.4 Vehicle is prepared prior to commencing water crossing 2.5 Engine revolutions are kept constant without sudden acceleration or deceleration and bow wave maintained 2.6 Brakes are dried off by gentle application whilst moving 2.7 Engine oils are checked for contamination, and differential and gear box oils are arranged to be checked after prolonged periods in water 2.8 Aircleaner elements are checked for water intrusion to assess air intake operational effectiveness
3. Operate vehicle in rugged terrain	3.1 Intended vehicle path is inspected prior to negotiation of rugged terrain 3.2 Correct gear/range is selected to negotiate terrain 3.3 Freewheel hubs are engaged and disengaged in accordance with driving conditions 3.4 Vehicle controls are set in accordance with manufacturer's specifications for operation in the surrounding terrain 3.5 Traction is maintained in accordance with requirements of the vehicle and the surrounding terrain 3.6 Chains are fitted to vehicle in accordance with manufacturer's specifications as required by terrain

- 3.7 Vehicle load is inspected, positioned and secured to maximise traction for four wheel driving
- 3.8 Terrain is negotiated in accordance with requirements for specific driving conditions

Key competencies

The seven key competencies represent generic skills considered necessary for effective participation by an individual in the workplace. Performance Level 1 at this level, the candidate is required to undertake tasks effectively. Performance Level 2 at this level, the candidate is required to manage tasks. Performance Level 3 at this level, the candidate is required to use concepts for evaluating and reshaping tasks.

Key Competency	Example of Application	Performance Level
Communicating ideas and information	By communicating in simple language to confirm operation requirements, convey information and requests to colleagues, and report and record outcomes	2
Collecting analysing and organising information	By assessing water depth and speed for water crossing with a 4x4 vehicle	3
Planning and organising activities	By organising work activities in the correct sequence for 4x4 operations to be completed within the designated timeframes	2
Working with others and in teams	By using effective communication and interpersonal techniques with colleagues and others to maximise safety	2
Using mathematical ideas and techniques	By calculating time to complete tasks and estimating tools, equipment and material requirements	1
Solving problems	By establishing safe and effective 4x4 processes which anticipate likely problems	3
Using technology	By selecting and using 4x4 vehicles and equipment to perform water crossings and operations over rugged terrain	2

Skills and Knowledge

Required skills include:

- comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for performing 4x4 operations over rugged terrain and water crossings
- use and maintain relevant tools, machinery and equipment
- identify problems and equipment faults and demonstrate appropriate response procedures
- use appropriate communication and interpersonal techniques with colleagues and others
- accurately record and report workplace information, and maintain documentation
- effectively assess depth and speed of water for safe crossing
- efficiently and safely perform water crossings
- safely negotiate steep and uneven terrain
- effectively perform minor routine servicing of vehicle
- safely negotiate difficult terrain with a full load of water on vehicle (for fire fighting duties)
- effectively and safely stop and start on a steep terrain

Required knowledge and understanding includes:

- applicable Commonwealth, State or Territory licensing, legislative, regulatory or certification requirements and codes of practice relevant to performing 4x4 operations over rugged terrain and water crossings
- organisational and site standards, requirements, policies and procedures for performing 4x4 operations over rugged terrain and water crossings

- principles of cultural diversity and access and equity
- environmental protection requirements, including the safe disposal of waste material
- established communication channels and protocols
- problem identification and resolution
- types of tools and equipment and procedures for their safe use, operation and maintenance
- operational knowledge of 4x4 vehicle including controls, instruments and indicators and their use
- road rules, regulations, permit and licence requirements of the relevant State/Territory road traffic authority
- 4x4 operations and techniques
- water crossing methods including hazards and risks
- vehicle maintenance requirements following water crossings
- procedures for the recording, reporting and maintenance of workplace records and information
- appropriate mathematical procedures for estimation and measurement

Range statement

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below

OHS requirements are to be in accordance with Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures. Requirements may include:

- the use of personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Legislative requirements are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements may include:

Organisational requirements	<ul style="list-style-type: none"> ● heritage and traditional land owner issues ● may include legal, organisational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)
Water crossings	<ul style="list-style-type: none"> ● may include rivers, streams, creeks, fords, channels, wash outs, causeways, flooded roads/terrain and other shallow water bodies
Terrain	<ul style="list-style-type: none"> ● is to include rugged terrain off-road conditions that can be smooth, rough, uneven, slippery, wet, icy, boggy, sandy, steep or hilly
Assessed	<ul style="list-style-type: none"> ● may include use of local knowledge relating to types of water crossings or terrain
Vehicle	<ul style="list-style-type: none"> ● may include all terrain vehicles, cars, utilities, trailers and light trucks
4x4s	<ul style="list-style-type: none"> ● are to include vehicles fitted with four wheel drive ratio gear boxes
Hazards and risks	<ul style="list-style-type: none"> ● may include flowing water moving at greater than one metre a second, speed and volume of water, underwater surfaces, debris in water, rocks and other unexpected obstacles, variable water depth and width of crossing, risk of vehicle being swept down the waterway, damage to vehicle, depth of water if a return journey is planned, tidal influences, crocodiles and snakes in some areas, wet and iced terrain, flooded terrain, fire in vehicle, faulty brakes, leaking fuel, faulty steering mechanism on vehicle, animals and objects in vehicle path, windy or foggy sections of terrain, steep slopes
Surfaces	<ul style="list-style-type: none"> ● may include sand, mud, stones, rocks, gravel, concrete, unevenness including holes and cracks in the surface, slippery slime covered causeways, rocks, loose and shifting surfaces
Communication	<ul style="list-style-type: none"> ● may include verbal and non-verbal language, constructive feedback, active listening, questioning to clarify and confirm understanding, use of positive, confident and cooperative language, use of language and concepts appropriate to individual social and cultural differences, control of tone of voice and body language
Entry and exit points	<ul style="list-style-type: none"> ● are to include safe locations for entry into and out of a waterway with shallow run ins and exits and a firm base
Depth of water	<ul style="list-style-type: none"> ● is the maximum height that may be crossed safely according to the vehicle manufacturer's specifications
Indicators or activities	<ul style="list-style-type: none"> ● may include water depth indicators in the waterway, local markings and rocks or wading activities by a colleague or operator with suitable precautions taken that may include the ability to swim, use of floatation devices, or rope
Gear/ratio	<ul style="list-style-type: none"> ● is to include an appropriate gear/ratio which permits continual forward movement
Vehicle preparation	<ul style="list-style-type: none"> ● may include placing a cover such as a tarp securely across the front of the vehicle when required by water depth, spraying of water repellent on distributor and ignition wires, changing wheel hubs to engage/lock position, and selecting either 4WD low or 4WD high
Manufacturer's specifications	<ul style="list-style-type: none"> ● may include engine characteristics, systems warning function, four wheel drive operation, radius of turning circle, safety procedures, instructions relating to engine air intake

Evidence guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package

Overview of assessment	<ul style="list-style-type: none"> ● A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently perform 4x4 operations over water crossings and rugged terrain within organisational requirements
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<ul style="list-style-type: none"> ● Comply with applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice, including OHS, environmental and organisational policies and procedures, relevant to performing complex 4x4 operations ● Comply with applicable licensing or certification requirements ● Communicate effectively and work safely with others in the rough terrain or water crossing location ● Effectively assess safety of planned water crossing using available indicators ● Efficiently perform 4x4 operations over a range of rugged terrain and water crossings in accordance with the circumstances and 4x4 OHS operating regulations
Context of and specific resources	<ul style="list-style-type: none"> ● Competency is to be assessed in the workplace or realistically simulated workplace

for assessment

- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to performing water crossings and recovery of 4x4 vehicles
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI05 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role



Appendix C

Relevant section of OH&S legislation

Division 2—Main duties of employers

21 Duties of employers to employees

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- (1) An employer must, so far as is reasonably practicable, provide and maintain for employees of the employer a working environment that is safe and without risks to health.
Penalty: 1800 penalty units for a natural person;
9000 penalty units for a body corporate.
- (2) Without limiting subsection (1), an employer contravenes that subsection if the employer fails to do any of the following—
 - (a) provide or maintain plant or systems of work that are, so far as is reasonably practicable, safe and without risks to health;
 - (b) make arrangements for ensuring, so far as is reasonably practicable, safety and the absence of risks to health in connection with the use, handling, storage or transport of plant or substances;
 - (c) maintain, so far as is reasonably practicable, each workplace under the employer's management and control in a condition that is safe and without risks to health;
 - (d) provide, so far as is reasonably practicable, adequate facilities for the welfare of employees at any workplace under the management and control of the employer;
 - (e) provide such information, instruction, training or supervision to employees of the employer as is necessary to enable those persons to perform their work in a way that is safe and without risks to health.
- (3) For the purposes of subsections (1) and (2)—
 - (a) a reference to an employee includes a reference to an independent contractor engaged by an employer and any employees of the independent contractor; and
 - (b) the duties of an employer under those subsections extend to an independent contractor engaged by the employer, and any employees of the independent contractor, in relation to matters over which the employer has control or would have control if not for any agreement purporting to limit or remove that control.
- (4) An offence against subsection (1) is an indictable offence.

Note

However, the offence may be heard and determined summarily (see section 53 of, and Schedule 4 to, the **Magistrates' Court Act 1989**).

22 Duties of employers to monitor health and conditions etc.

- (1) An employer must, so far as is reasonably practicable—
 - (a) monitor the health of employees of the employer; and

s. 23

(b) monitor conditions at any workplace under the employer's management and control; and

(c) provide information to employees of the employer (in such other languages as appropriate) concerning health and safety at the workplace, including the names of persons to whom an employee may make an enquiry or complaint about health and safety.

Penalty: 240 penalty units for a natural person;
1200 penalty units for a body corporate.

(2) An employer must, so far as is reasonably practicable—

(a) keep information and records relating to the health and safety of employees of the employer; and

(b) employ or engage persons who are suitably qualified in relation to occupational health and safety to provide advice to the employer concerning the health and safety of employees of the employer.

Penalty: 60 penalty units for a natural person;
300 penalty units for a body corporate.

23 Duties of employers to other persons

(1) An employer must ensure, so far as is reasonably practicable, that persons other than employees of the employer are not exposed to risks to their health or safety arising from the conduct of the undertaking of the employer.

Penalty: 1800 penalty units for a natural person;
9000 penalty units for a body corporate.

(2) An offence against subsection (1) is an indictable offence.

Note

However, the offence may be heard and determined summarily (see section 53 of, and Schedule 4 to, the **Magistrates' Court Act 1989**).



Appendix D

Drive CFA vehicles matrix

DRIVING CFA VEHICLES

Vehicle Type	Drivers licence	Drivers licence endorsement	Endorsement as per relevant SOP	Legislation & Policy Skills Part "A"	Legislation & Policy Skills Part "B"	Drive Vehicles Under Operational Conditions PUA/VEH001A	Perform Complex 4x4 Operations FPIFGM3208A or CFA competency
Transport Vehicle Code 3	Yes	No	Yes	Yes			
Transport Vehicle Code 1	Yes	No	Yes	Yes	Yes	Yes	
Transport Vehicle Off Road	Yes	No	Yes	Yes	Yes	Yes	Yes
Slip on Units Code 3	Yes	No	Yes	Yes			Yes
Slip on Units Code 1	Yes	No	Yes	Yes	Yes	Yes	Yes
Slip on Units Off Road	Yes	No	Yes	Yes	Yes	Yes	Yes
Pumper Code 3	Yes	Yes M/R	Yes	Yes			
Pumper Code 1	Yes	Yes M/R	Yes	Yes	Yes	Yes	
Pumper Tanker Code 3	Yes	Yes M/R	Yes	Yes			

DRIVING CFA VEHICLES

Vehicle Type	Drivers licence	Drivers licence endorsement	Endorsement as per relevant SOP	Legislation & Policy Skills Pak Part "A"	Legislation & Policy Skills Pak Part "B"	Drive Vehicles Under Operational Conditions PUAVEH001A	Perform Complex 4x4 Operations FPIFGM3208A or CFA competency
Pumper Tanker Code 1	Yes	Yes M/R	Yes	Yes	Yes	Yes	
Pumper Tanker Off Road	Yes	Yes M/R	Yes	Yes	Yes	Yes	Yes
Tanker Code 3	Yes	Yes M/R	Yes	Yes			
Tanker Code 1	Yes	Yes M/R	Yes	Yes	Yes	Yes	
Tanker Off Road	Yes	Yes M/R	Yes	Yes	Yes	Yes	Yes
Aerial Appliance Code 3	Yes	Yes H/R	Yes	Yes			
Aerial Appliance Code 1	Yes	Yes H/R	Yes	Yes	Yes	Yes	
Bus < 8 tonnes or seats < 13 adults	Yes	Yes L/R	Yes	Yes			
Bus > 8 tonnes or seats > 12 adults	Yes	Yes M/R	Yes	Yes			



DRIVING CFA VEHICLES

Vehicle Type	Drivers licence	Drivers licence endorsement	Endorsement as per relevant SOP	Legislation & Policy Skills Part "A"	Legislation & Policy Skills Part "B"	Drive Vehicles Under Operational Conditions PUAVEH001A	Perform Complex 4x4 Operations FPIFGM3208A or CFA competency
Specialist Appliance Code 3	Yes	As required by Vicroads	Yes	Yes			
Specialist Appliance Code 1	Yes	As required by Vicroads	Yes	Yes	Yes	Yes	
Specialist Appliance Off Road	Yes	As required by Vicroads	Yes	Yes	Yes	Yes	As deemed appropriate

Specialist Appliances to include, however not limited to –

<ul style="list-style-type: none"> ❖ Hazmat ❖ Salvage ❖ Rescue ❖ Lighting ❖ Hose Layers ❖ Multi Purpose Vehicle ❖ Mobile Communications Vehicle ❖ Forward Operations Vehicle 	<ul style="list-style-type: none"> ❖ Protective Equipment Van ❖ DMO Van ❖ Comms Dept ❖ Tower Overseas ❖ Chemical, Biological, Radiation Vehicle ❖ Bulk Water Carriers ❖ Mobile Education Unit ❖ Alpine Vehicles
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Appendix E

Draft driver endorsement check list



Driver endorsement check sheet

SOP 12.03 requires the OIC of a brigade to “endorse any person under their control to drive and operate any CFA vehicle”

SOP 12.04 requires the OIC if a brigade “shall determine which members are permitted to drive a CFA vehicle Code 1. This endorsement shall be based on competency, endorsement and demonstrated aptitude”.

This check list is not definitive and is only a guide to the issues you need to consider when endorsing a member to drive CFA/brigade vehicles, the decision to endorse a driver is up to you, please choose carefully.

- Does the member hold a current drivers licence appropriately endorsed for the vehicle? Yes No
- Does the member have a current competency for on road driving? Yes No
- Does the member have a current competency for off road driving? Yes No
- Are you personally aware of the driving ability of the member? Yes No
- Do you believe the member is a competent and safe driver? Yes No
- Are you aware of any medical or other issues that may impact on the member’s ability to drive safely? Yes No
- Are there any restrictions you want to place on the members in relation to driving CFA vehicles? Yes No
- Are the brigade members happy to be driven by the member? Yes No
- Are you happy to endorse the member to drive CFA vehicles? Yes No

If you have decided to endorse the member to drive CFA/brigade vehicles please formally register you endorsement, listing the vehicles the member has been endorsed to drive and if the endorsement includes Code 1 driving.

----- OICs signature ----- Date

----- Members name ----- Vol/staff number

Vehicles member is endorsed to drive ----- Code 1 Yes No

----- Code 1 Yes No ----- Code 1 Yes No

----- Code 1 Yes No ----- Code 1 Yes No

Any restrictions placed on member -----



Appendix F

Fiskville off-road driver training facility



Water crossing



Sand feature

Uneven/difficult terrain

Mud feature





Rocky terrain



Side slope

Stall recovery procedures



Entry, exit & ramp over angles





Appendix G

Example hazard assessment form



FORM FOR DOCUMENTING HAZARDS, RISKS AND RISK CONTROL MEASURES

Worksheet No: Area covered in the assessment: Steep slopes – Ascending and Descending
Date of Assessment: Assessment conducted by:

People consulted:
Risk assessment method used:

No.	Hazards Identified (Describe the situation which could possibly give rise to injury, illness or disease)	Is there any risk? (ie is there any likelihood of injury illness or disease occurring?)		Where there is a risk, describe the proposed risk control measures	Are the risk control measures practicable?		Implementation Date for the practicable risk control measures	Responsible person
		Yes	No		Yes	No*		
1.	Degree of slope	√			√			
		√		Degree of slope within recognized teaching parameters (up to 30°) Students under constant supervision of competent instructor while driving Assessed prior to course	√			
2.	Type of surface (gravel, clay, shale, rock, sand)							
3.	Sun							
4.	Dust							
5.	Water control devices (roll tops)							
6.	Side slope (of track)			Degree of slope within recognized teaching parameters	√			
7.	Vegetation							
8.	Striking objects (vehicle) (side windows, roof with face, head)			Seat belts worn at all times. Drive at appropriate speed.	√			



Page 1 of 2



FORM FOR DOCUMENTING HAZARDS, RISKS AND RISK CONTROL MEASURES

Worksheet No: Area covered in the assessment: Stall Procedure Area
Date of Assessment: Assessment conducted by:

People consulted:
Risk assessment method used:

No.	Hazards Identified (Describe the situation which could possibly give rise to injury, illness or disease)	Is there any risk? (ie is there any likelihood of injury illness or disease occurring?)		List any risk control measures already implemented to address the hazard	Where there is a risk, describe the proposed risk control measures	Are the risk control measures practicable?		Implementation Date for the practicable risk control measures	Responsible person
		Yes	No			Yes	No*		
1.	Degree of Slope	✓		Degree of slope within recognized teaching parameters		✓			
		✓		Students under constant supervision of competent instructor during procedure		✓			
2.	Risk of collision	✓		All stall procedure slopes have sufficient separation distances between vehicles to avoid collision during procedure		✓			
		✓		Instructor and student to be constantly aware of other vehicles in close proximity		✓			
				Ensure clear area behind slope for reversing vehicles					
3.	Overturning of appliance	✓		Ensure instructor and student awareness of proximity to edge, particularly while reversing.	Identify edge with visible materials (tape, witches hats) (see attached photo)	✓			
		✓			Ensure newly constructed areas are appropriately compacted	✓			

4.	Type of surface (loose, rocky, slippery, ruts)	√														
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