



HUMBERSIDE FIRE AND RESCUE SERVICE

People & Development

Fitness and Wellbeing Policy

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Responsible Person	Head of Occupational Health & Wellbeing
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What we must
do well



How we support our
communities



We value and support
the people we employ



We efficiently manage
the Service

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1. INTRODUCTION

Humberside Fire and Rescue Service (HFRS) will encourage a positive attitude to fitness by providing appropriate information and guidance on personal fitness and health by the provision of information, instructors, appropriate equipment and facilities, together with a programme of assessment. This is inclusive of both operational and non-operational staff.

All operational staff from firefighter to the Chief Fire Officer will be expected to achieve and maintain a minimum standard of cardiorespiratory fitness, muscular strength and muscular endurance commensurate with their rank. This applies to all Full-Time, On-Call, Day-Duty and Flexible Duty System (FDS) staff and contingency fire crew.

Operational Staff (Grey Book)

Physical fitness of operational staff is a safety critical issue and is reflected by minimum occupational standards to ensure individuals can perform their role safely and effectively. HFRS has a legal responsibility and duty of care to safeguard the health, safety, and welfare of its staff members in accordance with the Health and Safety at Work Act 1974 and legislation created as a result of this Act. In addition, the government sets out its expectations and requirements for Fire and Rescue Authorities through 'The National Framework'; firefighter fitness is an addendum to this framework. It is recognised that the benefits of fitness extend beyond operational capabilities and are also associated with reduced absence from the workplace and career longevity, in addition to living a longer and healthier life.

Non-Operational Staff (Green Book)

The importance of health and wellbeing is also recognised by HFRS for non-operational employees. The benefits of leading a healthy lifestyle enhance employee wellbeing, workplace motivation and life outside of work, along with reducing workplace sickness and stress. For these reasons HFRS offers health and wellbeing opportunities across the entire workforce.

Core Code of Ethic

HFRS has adopted the Core Code of Ethics for Fire and Rescue Services. The service is committed to the ethical principles of the code and strives to apply them in all we do, therefore, those principles are reflected in this policy.

National Guidance

Any national guidance which has been adopted by HFRS, will be reflected in this policy.

This policy is adapted from the Fitness Management Framework as outlined by the National Fire Chiefs Council (NFCC) FireFit Steering Group and as such will be reviewed should that guidance be amended.

2. EQUALITY AND INCLUSION

HFRS has a legal responsibility under the Equality Act 2010, and a commitment, to ensure it does not discriminate either directly or indirectly in any of its functions and services or in its treatment of staff, in relation to race, sex, disability, sexual orientation, age, pregnancy and maternity, religion and belief, gender reassignment or marriage and civil partnership. It also has a duty to make reasonable adjustments for disabled applicants, employees and service users.

3. AIM AND OBJECTIVES

This policy outlines the minimum occupational fitness standards for operational staff as set out by the NFCC and evidenced by scientific literature. The fitness testing and management processes are detailed to provide guidance to both employees and managers. It also provides guidance on health and fitness opportunities for supporting non-operational employees.

4. ASSOCIATED DOCUMENTS

- [Equality Impact Analysis](#)
- Legal References
 - Health and Safety at Work Act 1974
 - The Management of Health and Safety at Work Regulations 1999
- [National Guidance](#)
 - [FireFit Steering Group Fitness Management Framework](#)
- [Sports and Welfare Constitution](#)
- [Absence Management Policy](#)
- [Health Surveillance Policy](#)

5. FITNESS STANDARD AND TESTING

Fitness assessments will be undertaken twice a year during the months of March and September. The assessments will comprise three tests that measure cardiorespiratory fitness, muscular strength and muscular endurance. Fitness assessments can only be conducted by the Fitness Manager (FM) or a Fitness & Wellbeing Adviser (FWA). The outcomes of fitness assessments will be shared with the individual's line manager due to the safety critical nature of the role and effects on crewing and emergency response.

All operational staff are individually responsible for their own level of fitness and for ensuring assessment is undertaken within the specified assessment periods of March and September each year.

The fitness management framework follows a traffic light system:

GREEN = Highly likely to be fit for operational duties.

AMBER = May or may not be fit for operational duties following OH referral.

RED = Highly likely to be unfit for operational duties.

The **AMBER** section reflects the variance that exists between individuals' abilities to cope with varied physically demanding firefighting duties.

Cardiorespiratory Fitness Assessment

The following assessments are available for a cardiorespiratory fitness assessment:

- Multi-stage fitness test (bleep test)
- Chester treadmill walk
- Chester treadmill run (test protocol change from Sept 2024. (See [Appendix A](#))
- Wattbike FireFit test
- Functional fireground fitness test
- Gas analysis test

See [Appendix A](#) for cardiorespiratory fitness assessment protocols.

Muscular Strength Assessment

Repeated lifts of a 10.5 metre ladder at the ladder head. With the heel of a 10.5 metre extension ladder either footed or resting against a building, the ladder (housed and pawled) is first lifted to shoulder height. **The ladder must be raised to above head height (to almost full arm's length and not locking out the joints) and back to chest height 10 times.** On completion the ladder is placed back on the ground. The correct manual handling techniques must be used at all times.

Where a 10.5m ladder is not accessible, a single 17.5kg dumbbell or 17.5kg barbell can be used as an accessible alternative, and in the same way must be lifted to chest height and shoulder pressed 10 times. Should anyone fail the alternative ladder press, then a standard ladder press with a 10.5m ladder must be arranged and completed. For the interim between ladder press assessments an individual may stay on operational duties.

Muscular Endurance Assessment

One length of 70-millimetre hose to be carried in each hand over a distance of 100 metres at a brisk walking pace. **Once picked up, the hose should not be placed down again until the test has been completed.** The exercise must be carried out using the correct manual handling and lifting technique.

Fitness Assessment Outcome

On completion of all three assessments, an individual's fitness will be classified as **GREEN - fit**, **AMBER – potentially unfit** or **RED - unfit** at the time of the test and the results will be recorded using the online Pro Health Analytics platform. Individuals may request an electronic copy of their fitness test summary from the FMs or FWA or an Occupational Health administrator.

Firefighter (FF), Crew Manager (CM) and Watch Manager (WM)

Cardiorespiratory Fitness

Individuals at the rank of FF, CM or WM must achieve a minimum cardiorespiratory fitness standard equal to or above an oxygen consumption ($\dot{V}O_2$) of 42.3 millilitres of oxygen per kilogram of body mass per minute ($\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$).

Cardiorespiratory Fitness Test Thresholds for FF, CM and WM

Cardiorespiratory Fitness Thresholds for FF, CM and WM						
	Chester Treadmill walk test	Chester Treadmill run test	Multi-stage fitness test (bleep test)	Wattbike FireFit test (2.66 watts per kg of body mass)	Functional fire ground test	Gas analysis test
Unfit	<10 mins	< 6 mins	≤ Level 6 Shuttle 7	≤ 30 points	> 11 min, 11 secs	< 35.6 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$
Potentially Unfit	≥ 10mins < 12mins	≥ 6 mins < 8 mins	≥ Level 6 Shuttle 8 ≤ Level 8 Shuttle 7	31-69 points	n/a	≥ 35.6 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$ to ≤ 42.2 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$
Fit	12 mins	8 mins	≥ Level 8 Shuttle 8	≥ 70 points	≤ 11 mins, 11 secs	≥ 42.3 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$

Cardiorespiratory Fitness Test Thresholds for SM and above

HFRS encourages staff at all levels to achieve the same level of physical fitness as a firefighter. However, NFCC guidance is such that the levels by which SM and above are removed from operational duties are at a lower threshold. Nevertheless, the FM and FWAs will provide programmes to support all staff groups.

Cardiorespiratory Fitness Thresholds for SM and above				
	Chester Treadmill walk test	Multi-stage fitness test (bleep test)	Wattbike FireFit test (2.28 watts per kg of body mass)	Gas analysis test
Unfit	< 8 mins	≤ Level 5 Shuttle 4	≤ 10 points	< 31.4 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$
Potentially Unfit	≥ 8mins ≤ 10mins 14secs	≥ Level 5 Shuttle 5 ≤ Level 7	11-39 points	≥ 31.4 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$ < 36.7 $\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$

Fit	≥ 10mins 15secs	≥ Level 7 Shuttle 1	≥40 points	≥ 36.8 ml·kg ⁻¹ ·min ⁻¹
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Please note the SM and above fitness standards only apply to cardiorespiratory fitness. Muscular strength and endurance standards are the same as FF to WM.

Promotion, Temporary Posts and Substantive Roles

In all circumstances where individuals have a temporary promotion taking them through the SM fitness threshold, the individual must pass to the fitness standard required for their substantive post.

Six Monthly Fitness Management Process

HFRS provide a range of health, fitness, wellbeing, and support mechanisms to assist operational staff to remain safe for operational duties.

In all circumstances where an individual is deemed **unfit (RED)** or **potentially unfit (AMBER)** for operational duties, an occupational health risk assessment must be completed by an Occupational Health Advisor (OHA).

Individuals with an **unfit (RED)** or **potentially unfit (AMBER)** will be removed from operational duties with immediate effect.

It is the individual's and their line manager's responsibility to report this to the Fitness Manager and raise an OPAS management referral. Upon receipt of the OPAS management referral, it is the responsibility of the Occupational Health & Wellbeing (OH&W) team to conduct the fitness management process, as displayed in [Figure 1. Six Monthly Cardiorespiratory Assessment Process](#) and [Figure 2. Six Monthly Muscular Strength and Endurance Assessment Process](#) (below).

Body Metrics

During each six-monthly fitness assessment, a record of height, body mass and BMI will be logged. Health, Safety & Environment (HSE) will be notified of individuals with a body mass greater than 115.0 kg regarding restrictions for working at heights equipment.

Both those with a weight ≥115.0kg and/or a BMI ≥ 30.0 kg·m² will be signposted for a Boditrax health scan at OH&W to assess body composition. Where appropriate, lifestyle advice will be given to improve weight management and reduce the risk of weight related health complications.

Figure 1. Six Monthly Cardiorespiratory Assessment Process

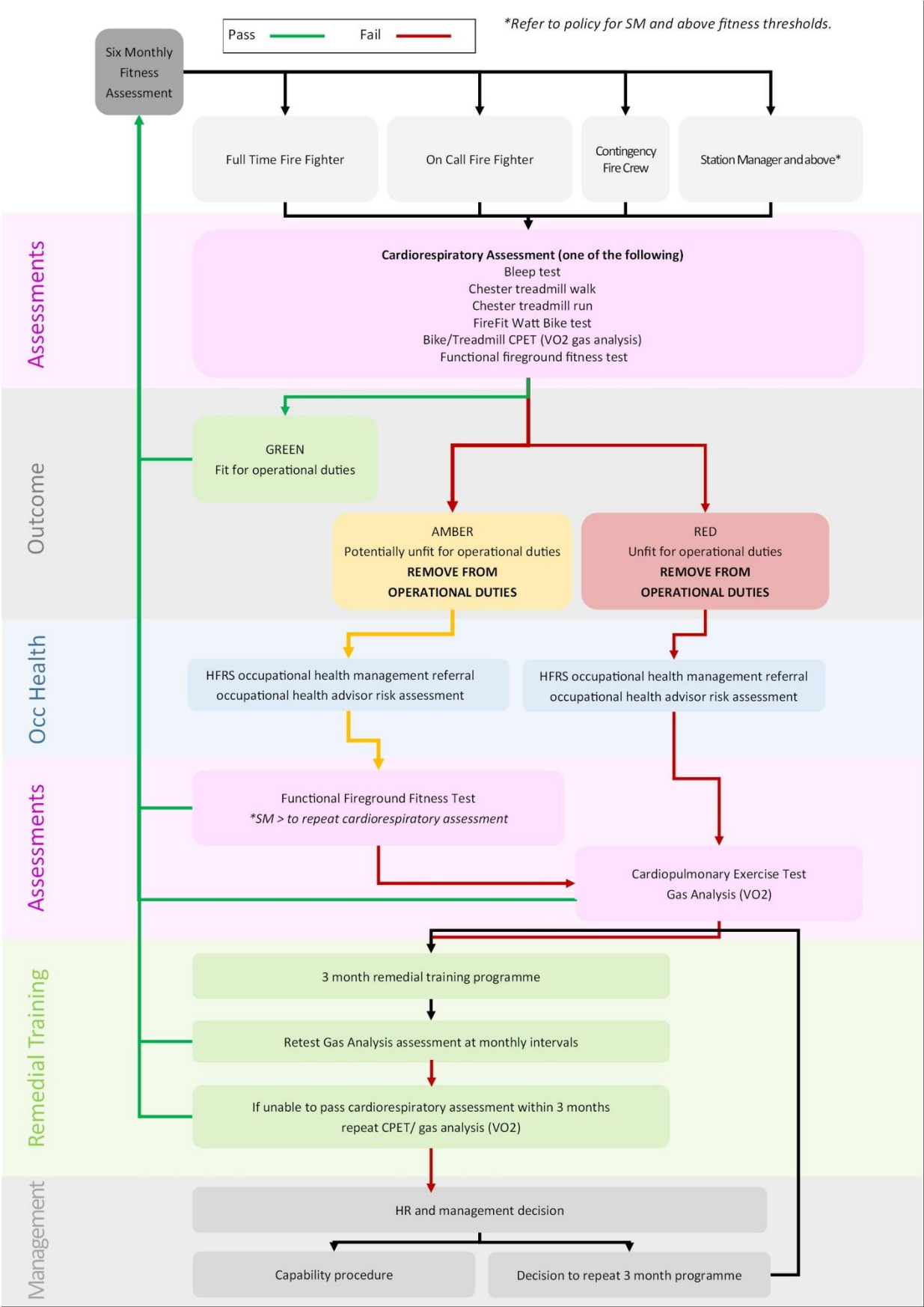
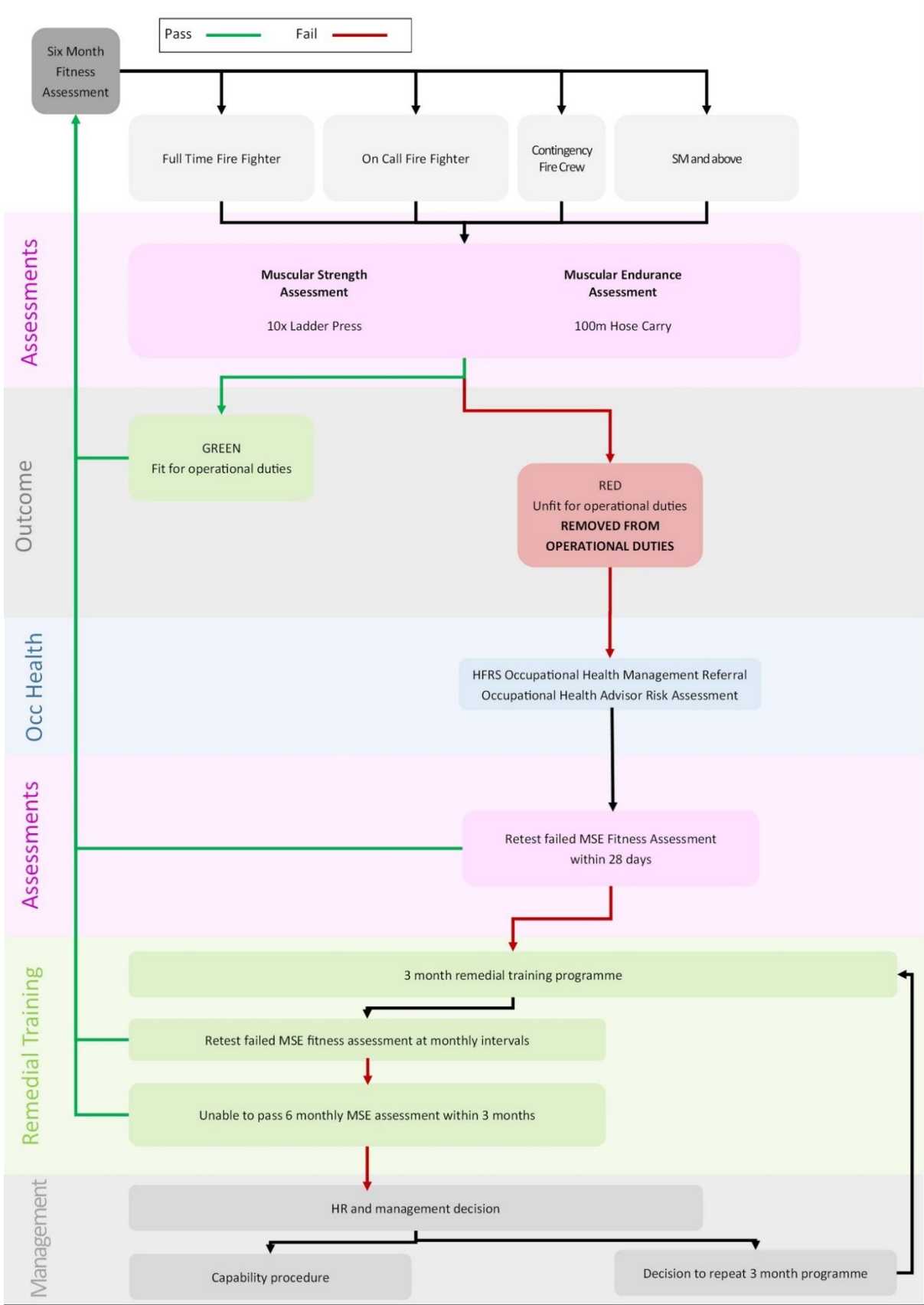


Figure 2. Six Monthly Muscular Strength and Endurance Assessment Process



Return to Work Fitness Tests

In accordance with the [Absence Management Policy](#), all operational staff absent for 28 days or more (excluding annual leave and other periods of 'fit' leave) should contact OH&W to arrange a return-to-work fitness test with the FM before they are permitted to resume operational duties and/or risk critical training. The return-to-work fitness test will include all three components required for a six-monthly fitness assessment (cardiorespiratory capacity, muscular strength, and muscular endurance), blood pressure, height, body mass and BMI. Blood pressure guidance will comply with the [Health Surveillance Policy](#) and where appropriate heart rate monitoring may be required for fitness assessments ([see Appendix A](#)).

Recruitment Fitness Pathway and Standards

HFRS prioritise health, fitness, and wellbeing throughout a firefighter's career; this starts at the point of entry to the service (the NFST recruitment stage) and for successful applicants in more depth during the initial training course. **Figure 3. Recruitment Fitness Pathway** and **Figure 4. Initial Training Fitness Pathway** detail the fitness requirements during the initial stages of a firefighter's career.

Figure 3. Recruitment Fitness Pathway

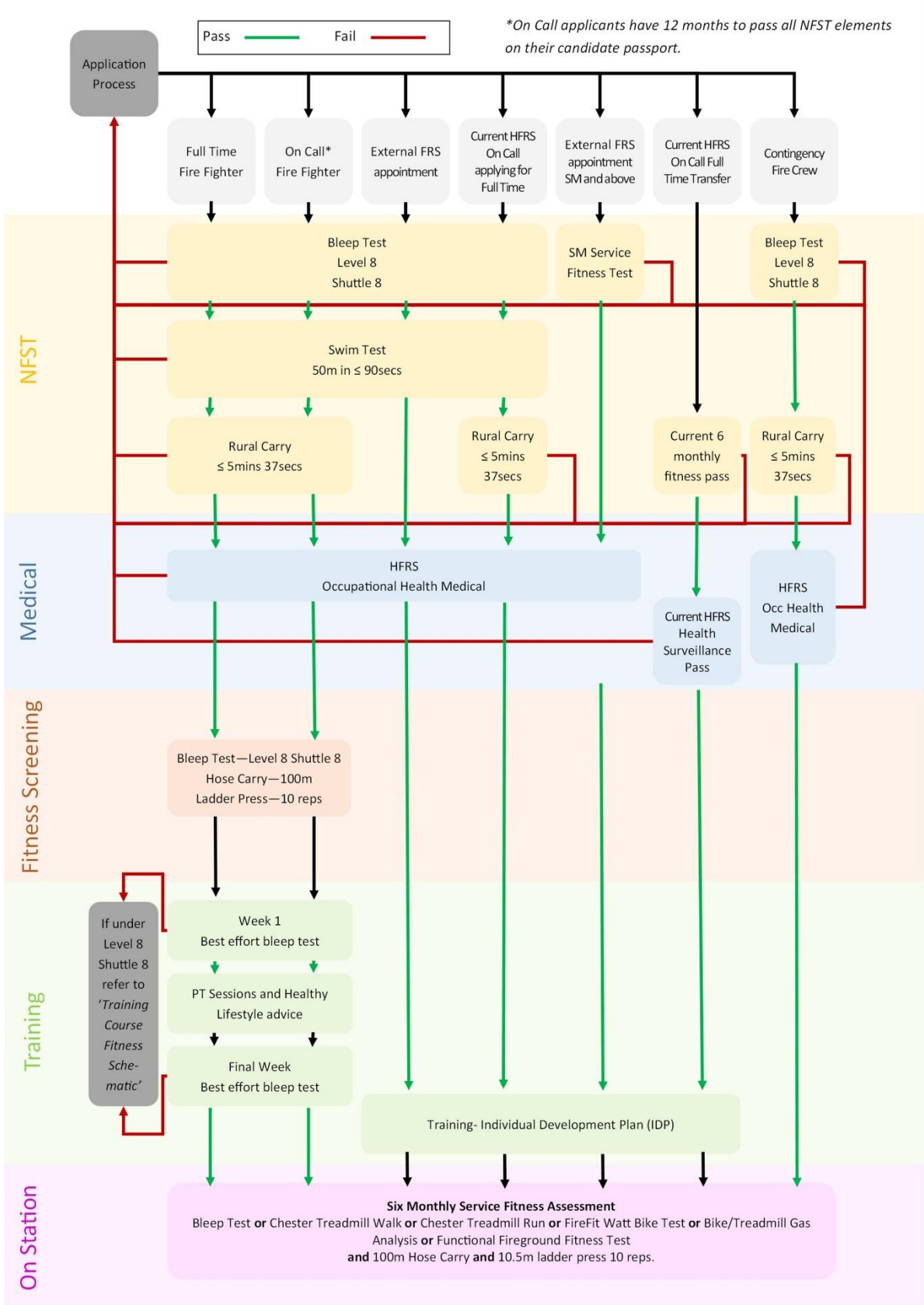
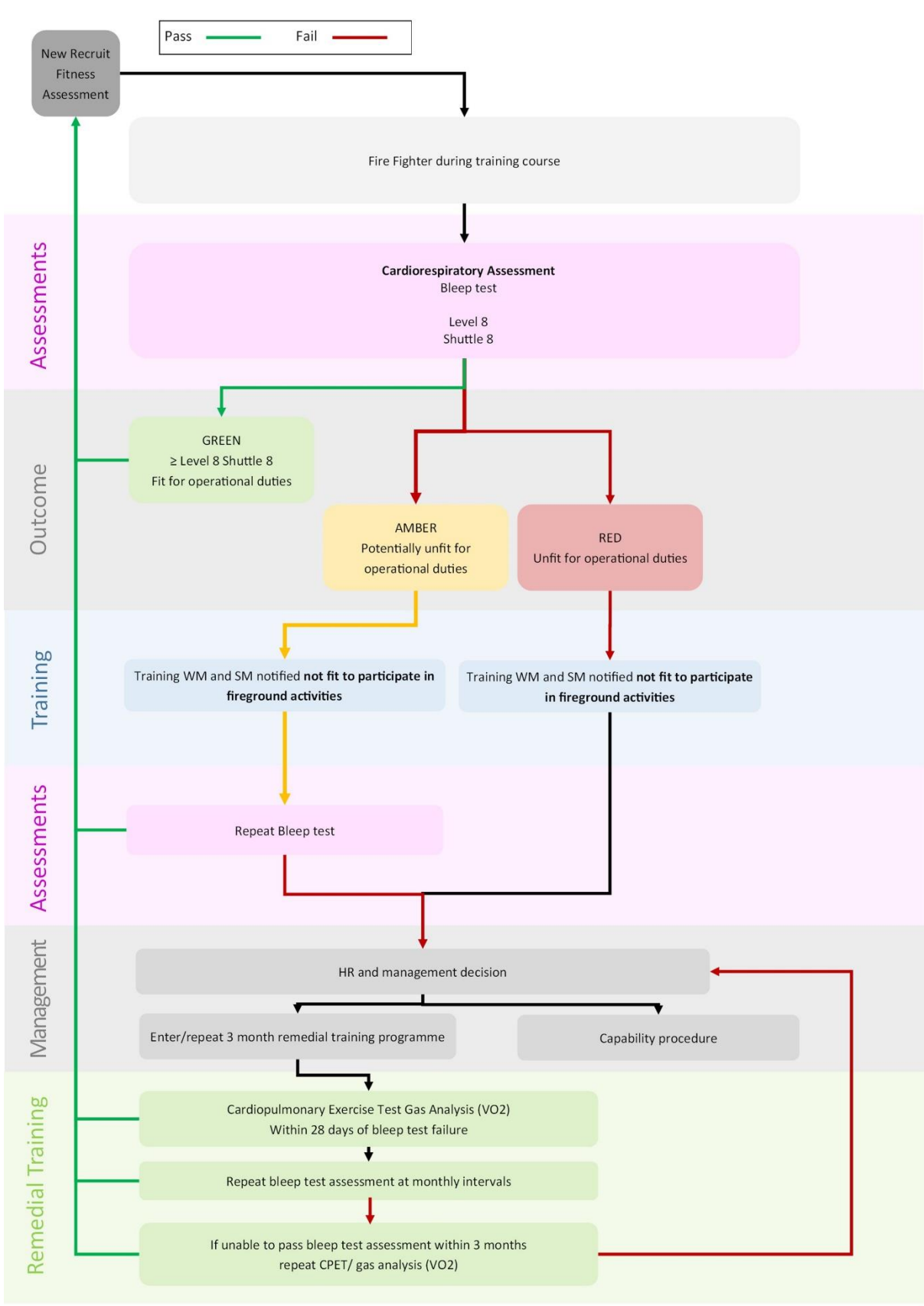


Figure 4. Initial Training Fitness Pathway



6. NON-OPERATIONAL (GREEN BOOK) FITNESS AND WELLBEING

Access to Station Facilities

All HFRS employees, including Green Book, can use station and SHQ fitness facilities in accordance with the [admission policy](#) detailed below. A PAR-Q (physical activity readiness questionnaire) and gym induction must be completed and logged on Pro Health Analytics prior to using any fitness facility.

Sign up to Sports and Welfare [here](#).

Induction Procedure

Gym inductions must be completed by a FM or a member of FWA team. Contact details can be found on the services '[Wellbeing](#)' SharePoint page or by contacting ochealthadmin@humberside.gov.uk. Individuals are responsible for declaring any health or medical concerns when completed the PAR-Q form. Furthermore, individuals should seek advice from the Fitness and Wellbeing team should any new conditions present that are a concern for physical activity. Where ID badge door entry is available, gym facilities access will only be granted once an induction has been completed. Gym inductions are recorded on PHA.

Wellbeing Breaks

HFRS provides opportunity for Green Book staff to take additional paid 30-minute wellbeing breaks, with the aim of reducing mental health illness, which is the highest cause of sickness absence within the Service for Green Book staff. Research suggests that breaks involving exercise reduces stress and increases performance.

Working Hours	Wellbeing Break Allocation
22.5 - 37 hours	2 x 30 min breaks per week
0 - 22.5 hours	1 x 30 min break per week

You can use your wellbeing break to:

- Go for a walk (alone or with others).
- Run.
- Ride a bike.
- Join a class organised by the Service (like yoga, pilates, or functional training).
- Use the service gym

[Wellbeing Break FAQs](#)

7. FITNESS FACILITIES

Equipment

Equipment owned by station Social Clubs, or the Sports and Welfare Association may be used but must be approved by the FM. A suitable risk assessment and safe system of work shall be completed by the Fitness and Wellbeing Team under the direction of

the FM. Equipment deemed unfit for use will be labelled accordingly and removed from the workplace. No personal fitness equipment will be used.

All staff will visually inspect any fitness equipment prior to use for its suitability. Any item found to be faulty or unsafe for use will be clearly labelled, immediately taken out of use, and reported to the FMs who will advise as to the correct course of action to be taken.

The FMs will manage, monitor and review the maintenance of fitness equipment and will be the direct point of contact, having authority for all equipment requirements relating to fitness training. The FMs will arrange for all equipment to receive a maintenance check by a reputable service provider.

Housekeeping

Weekly equipment standard checks and cleaning will be carried out in accordance with local station routines. Station, Watch and Crew Managers and Sports and Welfare representatives are responsible for auditing the standard checks. Cleaning of equipment is expected to be carried out by all gym users

Repairs to equipment may be declined by the FMs should a station not be adhering to housekeeping standards.

Fitness Facility Admission Policy

Fire station fitness facilities can be accessed by Green and Grey Book employees subject to the following conditions:

Full-Time Station: Individuals attending a Full-Time station should be courteous of station/watch PT times. The watch PT time will take priority over any other user of the facilities.

Exercising Alone: Individuals attending fitness facilities alone should contact Control as they enter and leave the facility.

Off The Run / Off Sick / Amended Duties: As part of a recovery/rehabilitation for both physical and mental wellbeing, individuals who are removed from operational duties or off sick from Green Book roles may continue to attend station fitness facilities if approved by OH&W.

On-Call Candidates: To prepare for NFST testing external candidates may attend an On-Call station fitness facility. Individuals must be supervised at all times, with the most senior employee on station responsible for their attendance on station.

Recruits: Employees on their initial training course may attend any HFRS fitness facility following their training course gym induction.

Family/Friends: Employees' spouses, partners, immediate family members and friends may access SHQ and station fitness facilities from the age of 18. For each user a gym induction is required and the monthly fee to Sports and Welfare is to be paid by the current HFRS employee for each additional member (e.g. £3 for HFRS employee, £3

for family member/friend = £6 monthly salary deduction). Access key fobs will not be issued for friends and family who must only attend facilities when in attendance with the current HFRS employee.

Retired HFRS employees: Retired employees may continue to use HFRS fitness facilities by paying an annual membership of £40 due 1 January. Contact the Sports and Welfare Treasurer at SHQ to arrange payments.

Absolute Contraindications to Exercise

The following conditions are absolute contraindications to exercise and would prohibit an individual from accessing any of our fitness facilities prior to seeking medical advice.

- Unstable angina,
- Systolic blood pressure ≥ 180 and/or diastolic ≥ 100 mmHg,
- Resting tachycardia > 100 bpm,
- Uncontrolled atrial or ventricular arrhythmias
- Unstable or acute heart failure
- Unstable diabetes
- Febrile illness
- Ventricular Aneurysm
- Chronic infectious disease
- Other known cardiovascular or metabolic disease.

8. RESPONSIBILITIES

Individuals

All operational staff are individually responsible for their own level of fitness and for ensuring assessments are undertaken within the specified assessment periods of March and September each year. Individuals on dual role contracts, both Full-Time and On-Call, should undertake their fitness test at the soonest opportunity, preferably at their Full-Time station. Fitness assessments performed after the designated fitness assessment months will be recorded as a 'late assessment'. Repeated late assessments will be highlighted by the FMs and reported to an individual's line manager.

Individuals should not wait until the six-month testing period to participate in physical activity but should regularly exercise whilst off duty throughout the year. Individuals can contact their station FWA or the FM if they require assistance with any issues they may have. Station-based staff are required to participate in physical training at work within the designated PT timings throughout their shift.

Managers

Managers are responsible for ensuring the delivery of the six-monthly fitness assessment programme for all operational staff under their control and take appropriate action within the terms of this policy to follow appropriate guidance if individuals fail to achieve and maintain the minimum standard.

Opportunities for physical training should be provided to operational staff and managers should support maximum participation of the Watch. Managers are actively encouraged to engage with the FWA or FM to provide structured PT programmes for the station. Managers are also encouraged to actively support watch members who are following an injury rehabilitation program.

Managers may request an additional fitness test should a concern be raised on the fireground regarding an individual's ability to perform their role safely and effectively. In such cases the criterion standard test will be utilised to provide an objective assessment as to the individual's fitness for operational duties.

Fitness Manager/s (FM)

The Fitness Manager is responsible for the coordination of:

- The Service's fitness assessment standards
- CPD of the FWA team
- Recruitment fitness testing standards
- Return to work fitness assessments
- Fitness related data collection and reporting
- Gas analysis fitness assessments
- FWA recruitment
- Liaison with management for an individual's return to work journey for those that are deemed potentially unfit or unfit for operational duty along with assisting returning Green Book employees.
- Six monthly fitness assessments
- Fitness and health related initiatives

Fitness managers may also deliver any of the duties listed for the FWA team below.

Fitness & Wellbeing Advisors (FWA)

The FWA team will be qualified to a minimum Level 3 Personal Trainer and are responsible to deliver:

- Six monthly fitness assessments
- National Firefighter Selection Tests (NFST)
- Health and fitness advice within the parameters of their qualifications
- Support prior to, and where required after, routine fitness testing
- Fitness related data collection (e.g., fitness assessment records)
- Liaison with management for an individual's return to work journey for those that are deemed potentially unfit or unfit for operational duty along with assisting returning Green Book employees.

Planning

Prior to the fitness testing months of March and September the FM and/or FWAs will contact their allocated stations and book a mutually convenient time for the testing to take place. Line managers must inform all staff in their span of control when and where testing will take place.

Employees will normally be assessed in groups where possible, although consideration of individual assessment may be given where appropriate. The assessment may be carried out in any order at the direction of the FM or FWA.

Other considerations will include:

- Employees will wear appropriate clothing and footwear.
- The assessor will be responsible for the employees being familiar and competent to undertake the assessment and use the protocol.
- The assessor will observe the employee throughout the test and will be responsible for the safety of the employee and be prepared to interrupt the activity to prevent an accident or injury occurring.
- **A suitable and sufficient risk assessment must be completed on all equipment, weather and ground conditions by the assessor before tests are undertaken.**
- **The assessor will ensure that suitable first aid equipment is provided at a nearby location should it be required.**
- Managers will be informed of non-attendance and appointment cancellation.

**For further guidance / information relating to this document, please contact
Occupational Health and Wellbeing.**

APPENDIX A: FITNESS ASSESSMENTS

Multi-Stage Fitness Test (Bleep Test)

Over a 20m course shuttles should be completed to a minimum of Level 8 Shuttle 8.

Audio file: [Bleep Test Audio](#)

Video: [Multi-stage Fitness Bleep Test Video](#)

Gas Analysis Test

The gas analysis test represents the criterion standard method to determine cardiorespiratory fitness. It is the only method to objectively quantify the upper limit of the cardiorespiratory system and represents best practice. Using a treadmill or bike, a suitable ramp test protocol is selected by a member of the Fitness and Wellbeing team. This test requires a mask to be worn and is performed to volitional exhaustion following a PAR-Q and blood pressure screening. Speak to a FM to discuss the best test protocol and training to prepare for the assessment.

Chester Treadmill Walk

Incline (%)	Time	Speed
0	0-2 mins	6.2kph
3	2-4mins	
6	4-6mins	
9	6-8 mins	
12	8-10 mins	
15	10-12 mins	
Total Time	12mins	

Chester Treadmill Run (up to Sept 2024)

Incline (%)	Time	Speed
0	0-2 mins	6.9kph
3	2-4mins	
6	4-6mins	
9	6-8 mins	
12	8-10 mins	
15	10-12 mins	
Total Time	12mins	

Chester Treadmill Run (September 2024 onwards)

Incline (%)	Time	Speed
0	0-2 mins	10.4kph
2	2-4mins	
4	4-6mins	
5	6-8mins	
Total Time	8mins	

Watt Bike FireFit Assessment

Using the Watt Bike App, a 10-minute continuous cardiorespiratory assessment can be performed. A current and accurate weight measurement must be logged on the user profile prior to the assessment. At the end of 10 minutes points score correlates to a predicted VO₂ indicative of the fitness requirements for operational staff as detailed below.

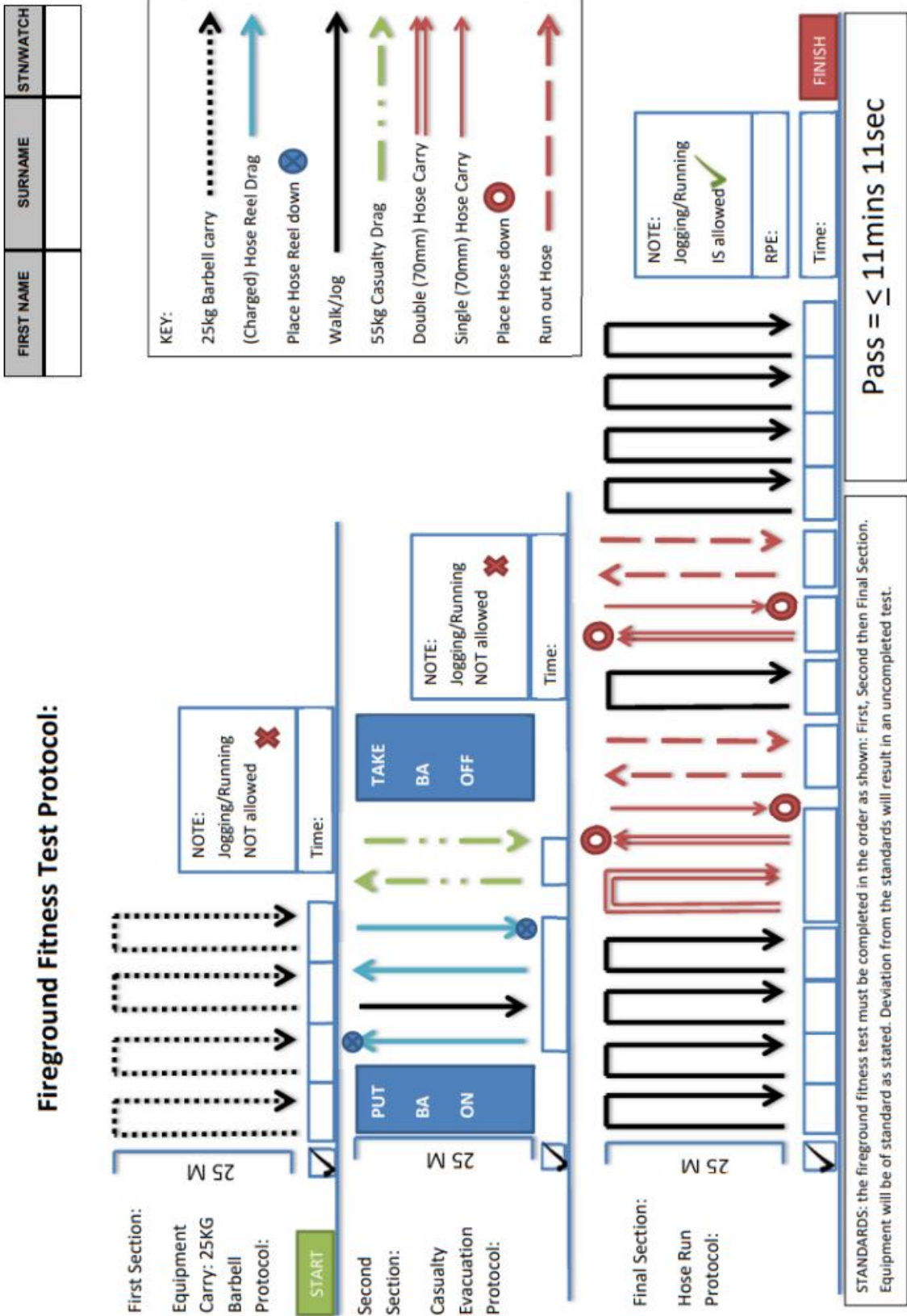
Relative VO ₂	10 minute W/kg (w)	Points
54	3.58	100
51	3.34	95
48	3.12	90
46	2.97	85
44	2.82	80
43	2.74	75
42	2.66	70
41	2.59	65
40	2.52	60
39	2.43	55
38	2.35	50
37.5	2.32	45
37	2.28	40
36	2.21	35
35	2.13	30
34	2.06	25
33	1.98	20
32	1.9	15
31	1.83	10
30	1.75	5

Rural Fire Carry Test

During NFST the Rural Carry Fitness Test is used as a fitness screening method for those that are not classified as a competent firefighter.

[Rural Fire Carry Test Video](#)

Figure 5. Functional Fireground Fitness Test



Blood Pressure Protocol and HR monitoring for Return-to-work Assessments

Systolic	Diastolic	Control Measure
≥ 180	≥ 110	Off the run, unable to participate in physical activity until BP is controlled. Occupational Health Advisor to be notified.
≥160 - 179	≥ 94 – 109*	Heart rate monitoring will be in place during any fitness assessment. To avoid the risk of maximal exercise an assessment will be curtailed at the point of an individual reaching 90% heart rate max (Karvonen heart rate reserve method).
≤159	≤93	No additional screening required.

Yee, E.B., Macpherson, A., Gledhill, N., Gledhill, S. & Jamnik, V. (2019). Impact of applying different resting blood pressure cut-points to clear for maximal exercise. *Work*,63(4): pp.635-642. doi: 10.3233/WOR-192952. PMID: 31282454.