

PREMISES (New Hangar) FIRE SAFETY RISK ASSESSMENT



**Bognor Regis Gliding Club
LEC Airfield
Shripney Lane
Bognor
PPO22 9NR**

Fire Safety Risk Assessment- Contents Page

Section 1: Scope of Report.....	3
Section 2: Premises Details.....	4
Section 3: Survey Findings.....	5
Section 3: Survey Findings.....	7
Section 4: General Survey Comments.....	9
Section 5: Photographs.....	10
Section 6: Fire Safety Management Guidance Notes.....	11
Section 7: Remedial Action Plan.....	12
Section 8: Risk Methodology.....	13
Section 9: The Review Process.....	14
Section 10: References.....	15
Section 11: Occupier Fire Safety Guidance and Advice.....	Error! Bookmark not defined.

Section 1: Scope of Report

This Fire Risk Assessment has been carried out in order to assist the 'Responsible Person' for the premises in complying with the relevant statutory provisions of the Management of Health and safety at Work Regulations 1999 and all relevant best practice guidance. The report reflects the circumstances found at the time of the survey only and does not absolve the 'Responsible Person(s)' from ensuring effective day-to-day fire safety management within the relevant parts of the premises, as required by law.

The recommendations made within current benchmark standards, i.e., Fire Safety Government Guidance documentation, Factories and Warehouses, Transport premises and facilities, Building Regulations Approved Codes of Practice, DCLG Guidance documents and relevant British Standards have been taken into consideration (where relevant and appropriate), in the compilation of this assessment report.

The report may contain some information provided by others with on site responsibility and no liability can be accepted by (replace wording) for the accuracy or otherwise of such information.

A separate 'Remedial Action Plan' is provided for this assessment, where it is intended that the 'Responsible Person' will utilise this facility in order to confirm action being taken as individual recommendations are implemented. The priority ratings stated within the remedial action plans are given as an indicative guide only and each of the recommendations should be implemented 'as soon as is reasonably practicable', to ensure the fire safety risks identified within the premises remain at a tolerable level.

In addition, the assessment findings should be made available for the information of all persons who may be considered at risk, as well as for inspection by Enforcing Authorities. Generally, the assessment must be reviewed whenever it is considered to be no longer valid, i.e., significant change in the use of the premises, material alteration, following any fire safety incident (or near hit) and at periodic intervals. The suggested review date based on the risk rating for these premises can be found on the next page and further guidance regarding the review process can be found in Section 8.

The risk assessment methodology used in this risk assessment is a combination of quantitative risk assessment (numerically assessing probabilities and consequences), qualitative risk assessment (judgmental assessment based on event analysis in conjunction with approved guidance documents) and a general Health and safety risk analysis as contained in BS8800: 2004. *Guide to Occupational Health and Safety Management Systems*. (See Section 7 for more information). This approach has been used by the assessor to determine the overall level of risk from fire within these premises taking into account all the identified hazards from the various sections of this report. The risk rating now includes the numerical grading, as well as the overall Low, Medium, or High risk judgement, in order to better show the difference between the previous and the current rating. Existing Control Measures (where appropriate) have been taken into consideration.

It is important to recognise the subjective nature of the assessment process and to use it as a guide only.

Any assessment enquiries should be made, in the first instance, direct to the nominated 'Responsible Person', as indicated in Section 2.

Section 2: Premises Details

Site Address	Bognor Regis Gliding Club, Shripney Lane, Bognor,PO22 9NR.
Responsible Person(s)	Julian Hitchcock
Assessment carried out by - Competent Person(s)	Ron Kirkwood- GIFireE, CFPA(EU)Dip
Date of This Assessment	25 January 2021
Purpose Built	Yes
Age of Construction	2020
No of Storeys	G
No of Flats/residential accommodation	N/A
No of Protected Stairs	0
No of Lifts	0
Licences likely to be in force	Petroleum Licence
Vulnerable Persons Reported (Y/N)	No
Intended Evacuation Strategy	Simultaneous
Last Fixed Electrical Service Date	To be confirmed
Last Gas Equipment Service Date	NA (None provided)
Last Fire Alarm Service Date	NA (None provided)
Last Emergency Lighting Service Date	Unknown
Last Fire Extinguisher Service Date	Annually
Last Dry Riser Test Date	NA (None provided)
Last Lightning Conductor Test Date	NA (None provided)

Risk Rating (Life Safety)	Medium	6
Risk Rating (Asset)	Medium	6

Section 3: Survey Findings

Safety Hazard Area	Satisfactory		Significant Findings	Risk
	Y	N		
IGNITION SOURCES	✓		<ul style="list-style-type: none"> ❑ Management procedure confirmed to control the activities of Contractors, although no contractor activity was noted at the time of the site visit were confirmed, i.e., use of approved contractors in third party accredited organisations, operate with appropriate insurance etc. ❑ The premises are a newly constructed which include the fixed electrical installations, i.e., premises wiring and associated equipment etc. ❑ The premises are used as an aviation hangar which also involves occasional maintenance and repair of aircraft. The risks from fire of any associated activities are considered to be Low/Normal. 	<p>Low</p> <p>Low</p> <p>Low</p>
COMBUSTIBLE STORAGE/WASTE MANAGEMENT		✓	<ul style="list-style-type: none"> ❑ Combustible storage/waste was observed to be minimal and waste management of a satisfactory standard overall at the time of inspection. Effective housekeeping will be required to be maintained to control combustible storage. ❑ A hard standing has been provided to the side of the hangar in preparation for the relocation of a bespoke bunded/static fuel tank suitable for the storage and provision of Avgas. The storage tank is subject to annual maintenance/inspection by an accredited contractor. The power supply confirms to BS 7671, 18th Edition wiring regulations with local means of isolation. The tank is to be positioned adjacent to the hangar, the steel fuel tank and metal construction of the hangar are non-combustible. The fuel tank and hangar are located by distance away from all other premises and or potential ignition sources. This equipment will also be subject to licensing conditions by the local Petroleum licensing authority. ❑ Portable fuel storage cannisters were observed within the hangar. Any fuel storage should be within suitable containers that are securely stopped-as observed. The quantity should be limited to 30 litres. It is also recommended the containers are stored within a flameproof cabinet. ❑ Where fuelling takes place, a provision should be in place to contain and absorb any spillage. This is required to prevent a build up or pooling of flammable liquid that potentially could be ignited. i.e., Petro-chemical absorbent mats, granules, dollies, dry sand etc. which could be contained within a grab pack. 	<p>Low</p> <p>Low</p> <p>Med</p> <p>Med</p>
FIRE DETECTION ARRANGEMENTS	✓		<p>The Hangar building is single storey and primarily used for storage/workshop purposes. There currently is not any life safety requirement for a means to automatically detect a fire within the premises. There is clear line of site from the back to the front internally therefore any potential fire developing would be observed.</p>	<p>Low</p>

FIRE WARNING ARRANGEMENTS	✓		The size and internal open plan layout mean the alarm can be raised verbally. See fire detection arrangements above.	Low
AVAILABILITY OF ESCAPE ROUTES	✓		<p>When the hangar doors are in the 'raised' position the premises are open fronted. When the hangar doors are closed a single side, door is positioned on the south side of the hangar. The premises meet the single travel distance to reach a final exit in either situation.</p> <p>Consideration should also be taken of height of the roof permitting any potential smoke to rise over 3m in height. This increases the time sufficient visibility is maintained and the ability of individuals within the building to safely evacuate.</p>	Low
PROTECTION OF ESCAPE ROUTES	✓		The internal layout and travel distance to reach a final exit from the single compartment premises do not require protection of escape routes.	Low

Section 3: Survey Findings

Safety Hazard Area	Satisfactory		Significant Findings	Risk
	Y	N		
VENTILATION ARRANGEMENTS	✓		No concerns were noted at the time of assessment. The double pitched roof has plastic roof lights in place which are likely to fail in a potential fire situation. The height of the ceiling assists in ensuring the escape route within the premises remains tenable for an additional time. Cross reference with 'AVAILABILITY OF ESCAPE ROUTES' section of this report.	Low
FIRE SAFETY SIGNAGE		✓	Additional 'No Smoking' signage would be required within the hangar, by the side entrance/exit doors and adjacent to the external fuel storage tank following its relocation. The signage should be conspicuously located.	Med
ADEQUACY OF ARTIFICIAL LIGHTING	✓		Although the survey was carried out during daylight hours, the artificial lighting units provided within the escape routes appeared adequate for purpose.	Low
ADEQUACY/AVAILABILITY OF EMERGENCY LIGHTING		✓	The hangar is located in a remote location of the airstrip and therefore would not benefit from artificial borrowed lighting via the surrounding environment. An illuminated exit sign is positioned above the side exit door which would provide limited illumination to the rear of the hangar. It is recommended a dark test is performed to confirm levels of emergency lighting. Particularly when the hangar is used for the storage of aircraft.	Med
FIRE FIGHTING PROVISION		✓	<input type="checkbox"/> Extinguishers should be provided suitable for use on electrical equipment, burning fuel and other materials i.e., plastic, paper, cardboard etc. within the hangar and positioned by the side exit door.	Med
			<input type="checkbox"/> Extinguishers of an appropriate type should also be provided solely for use on the external fuel tank and be located within close proximity to/readily accessible for use on the fuel storage tank. All extinguishers should be offered protection from extremes of weather/temperatures. Where stored remotely from the fuel tank a formalised procedure should be in place to ensure the extinguishers are available for use at the same time as the fuelling takes place.	Med
ACCESS AND FACILITIES FOR THE FIRE SERVICE	✓		Fire service access is considered good to all four sides of the premises and the fuel tank once repositioned.	Low
SECURITY/POTENTIAL FOR ARSON	✓		The premises are positioned on the far edge of the airfield away from the pedestrian and vehicle access. External security lighting is provided and the premises are secured when not in use.	Low

COMPARTMENTATION/ ASSET PROTECTION	✓		<p>The premise consist of a single compartment with no breaches observed. The construction is steel portal framed with corrugated steel cladding therefore of minimal combustibility.</p> <p>Roof lights are installed within the double pitched roof which are likely to fail in any potential significant fire and naturally venting the fire.</p> <p>The premises are not provided with automatic detection when not occupied. Therefore, any potential fire could develop undetected.</p>	Low
FIRE PROCEDURES		✓	Existing fire procedure exist for the site and would be required to be reviewed to include the Hangar and relocation of the Fuel Tank.	Med
CLUB MEMBERS/VISITORS	✓		<ul style="list-style-type: none"> ❑ The Hangar is ground floor only and set on level ground. Club members would be briefed and provided with fire procedures for the Hangar and use of the fuel store. ❑ Visitors to the site would be required to be supervised at all times by club members. ❑ Club Members are provided with fire training upon induction. 	Low Low Low
TESTING/MAINTENANCE OF FIRE SAFETY PROVISIONS	✓		<p>The testing/maintenance of fire safety provisions will be required in accordance with the relevant standards i.e., fire extinguishers-annually, emergency lighting- monthly in-house and annually, testing & maintenance of Fuel tank etc.</p> <p>Records are required to be maintained and available for inspection upon request of the relevant enforcing authorities.</p>	Low Low

Section 4: General Survey Comments

Additional/General Comments

The preceding sections of this report provide a summary of the general fire safety arrangements for the premises and highlight those 'Significant Findings' identified at the time of the survey only. Please refer to the remedial action plan for clarification regarding necessary improvements. For a more detailed explanation of the survey rationale and the risk rating methodology please see the relevant sections of this report or contact the 'Responsible Person(s)'.

Additional information regarding the management of fire safety for the premises and the presence of fire safety policies may not have been available from the Responsible Person at the time of the survey, but where it has this will have been included within the report. Implementation of those matters within this premises specific remedial action plan, combined with the implementation of those matters recommended within the fire safety management guidance section will help to ensure that all risks remain at an acceptable level. The aim should always be to address all action points within 'Reasonable' timescales, which will then result in an overall 'LOW' risk rating being applied. This will therefore mean that the safety issues within the common parts of this building may be deemed 'Tolerable' in accordance with current benchmark standards.

Buildings Description (Inc Means of Escape Arrangements)

The premises are a detached building used as an Aircraft Hangar. It is a steel portal framed building with a double pitched roof. It is clad with corrugated steel panels which achieve the combustibility rating Euroclass A1, i.e. Non-combustible.

To the front are roller shutter doors and on one side a single width exit door. The size of the single compartment is such that the location of the single side (final exit) door ensure the travel distance from within the building meet the requirements within government guidance when the roller shutter doors are closed.

Therefore the means of escape is considered to be satisfactory.

The building is situated on the outskirts of the airfield and at least 100m from any other buildings. Vehicles can access the Hangar building across the Airfield. Access to the site is limited via vehicle and pedestrian rail crossings which enhances the security of the site.

Generally, the building is maintained to a high standard and achieves the standard of the building regulations at that time.

The building is not fitted with a hard wired automatic fire alarm system which is not required due to its size, internal layout and clear line of site from the rear of the premises to the front. In addition the alarm can be raised throughout by shouting 'Fire!'

External and internal artificial lighting is provided for the Hangar. Emergency lighting is limited to an illuminated exit sign above the side exit door and this arrangement is generally considered to illuminate the exit but not the escape route from the building. The provision of internal emergency lighting should be reviewed for when the Hangar is in full use to confirm sufficient levels for means of escape purposes.

Section 5: Photographs



Potential location for fuel tank.



Internal Layout of Hangar



Side exit door/means of escape when front hangar doors are closed.

Section 6: Fire Safety Management Guidance Notes

Outside of the premises survey it should be ensured that the 'Responsible Person(s)' have adequate arrangements in place for managing fire safety for these premises on an ongoing basis. This should include relevant Policies and documented arrangements to show compliance with current Regulations and industry 'Best Practice' and should include, but not be limited to the items detailed below.

CONTROL OF CONTRACTORS	It should be ensured that adequate Policies and auditable arrangements are in place to control Contractors working on the premises in order that no additional fire safety risks are introduced. This should include obtaining confirmation of adequate Health and Safety arrangements appropriate to the risks, including (where relevant) Method Statements, Hot Works Systems and suitable levels of insurance being in place.
PERSONS SPECIFICALLY AT RISK	Although this assessment is aimed at addressing those areas of risk within the common parts of the premises and under the control of the Landlord/Managing Agents, it is recommended that a Policy be introduced in relation to potentially 'vulnerable persons', who may be considered especially at risk from fire. Suitable advice and guidance should be sought from the nominated 'Competent Persons'.
GENERAL MAINTENANCE OF FIRE SAFETY MEASURES	It should be confirmed that a suitable system of testing, maintenance and record keeping exists for all fire safety measures included within these premises. This should be in accordance with current guidance and industry best practice and clear lines of compliance should be made available through suitable and sufficient audit trails.
INFORMATION FOR OCCUPANTS	The findings of this assessment and any measures considered necessary to protect the occupants, such as general fire safety guidance and the action to be taken in the event of fire should be communicated as necessary.
RISK ASSESSMENT MANAGEMENT	The Landlord/Managing Agents should ensure that all risk assessments completed are 'Suitable and Sufficient' and conducted only by persons who may be considered as 'competent' to do so. Action points should be implemented in line with allocated priority ratings and all assessments should be reviewed in line with current guidance. Further advice is provided elsewhere within this report and additional information is available from the appointed 'Competent Persons'.
MANAGEMENT AUDIT AND REVIEW	All of the above arrangements should be kept under review and subject to 'audit', as deemed appropriate. The findings of any internal and/or external audits should be considered fully and any necessary changes to the existing fire safety management framework should be implemented accordingly.

Section 7: Remedial Action Plan

REF NO	IDENTIFIED HAZARD	At Risk Code	RECOMMENDED REMEDIAL ACTION	Priority	COMMENTS	Complete Y/N	DATE	Name
	BUILDING LIFE RISK RATING	N/A	N/A	6				
1	COMBUSTIBLE STORAGE/WASTE MANAGEMENT	R/O/P	Provide a flameproof cabinet for the safe storage of flammable liquids within the Hangar.			N		
2	COMBUSTIBLE STORAGE/WASTE MANAGEMENT	R/O/P	Provide appropriate means for dealing with minor spills of flammable liquids and safe disposal of used absorbent materials.			N		
3	FIRE SAFETY SIGNAGE	R/O/P	Provided 'No Smoking' signage conspicuously located by the side access/egress door of the Hangar and the external fuel storage tank.			N		
4	FIRE SAFETY SIGNAGE	R/O/P	Provide signage to indicate the internal and external electrical isolation points for the fuel Tank.			N		
5	ADEQUACY/AVAILABILITY OF EMERGENCY LIGHTING	R/O	Perform a dark test to confirm levels of emergency lighting. Particularly when the hangar is used to capacity for the storage of aircraft.		Provide additional emergency lighting where identified by the dark test.	N		
6	FIREFIGHTING PROVISION	R/O/P	Provided firefighting equipment for inside the Hangar and for use on the Fuel Tank i.e., 1x water, 1x Co2 and 2x dry powder for the fuel tank.		The dry powder extinguishers can be located just inside the front hangar door to provide protection from the weather. Door to be raised whilst fuelling takes place.	N		
7	FIRE PROCEDURES	R/O/P	Ensure the Airfield fire procedures are updated to include the new Hangar and relocation of the fuel tank.			N		
8	FIRE SAFETY MANAGEMENT	R/O/P	Ensure that a robust Fire Safety Management Framework is in place taking into account the recommendations within the main report. This should include testing and maintenance of fire safety provisions in line with current guidance.			Ongoing		

Priority Rating Guide - (RED - (High Priority) - Commence Immediately (AMBER - (Medium Priority) - Commence as soon as reasonably practicable AFTER all red items have been initiated) (GREEN - (Low Priority) - Commence as soon as reasonably practicable AFTER all red and amber items have been initiated)

At Risk Code - (R = Residents) (O = Others) (P = Property) - Items indicated R or O must be complied with in a reasonable timescale to satisfy the legislation. Items only indicated as P are advisory and should be complied within order to reduce the risk to property.

Section 8: Risk Methodology

NUMERICAL RISK EVALUATION

Risk = Hazard Severity x Likelihood of Occurrence

HAZARD SEVERITY MEASURED ON A SCALE OF 1 TO 5

1. **Nil** – Trivial or insignificant harm to persons, property or business activities.
2. **Slight** – Causing minor harm allowing work activities to continue
3. **Moderate** – More serious capable of resulting in 3 days or more off work for one or more individuals, or property damage resulting in a temporary interruption to business activities with some financial loss.
4. **High** – Possible fatality or serious injury to an individual. Longer term interruption to business and/or high financial cost.
5. **Very High** – Multiple fatality and or destruction to work environment. Long term or permanent business interruption and/or very high financial costs.

LIKELIHOOD OF OCCURRENCE ON A SCALE OF 1 TO 5

1. **Not Likely** – There is no real likelihood of it occurring
2. **Possible** – Possible occurrence, but potential is minimal
3. **Quite Possible** – Incident will only happen if several factors are present
4. **Likely** – Regular incidents occur, but no injury. May result in injury with additional factors introduced
5. **Very Likely** – Almost 100% certainty that an incident will occur or it is a common occurrence

A risk factor can be found using the equation, ranging from 1 (no severity and unlikely to happen) to 25 (just waiting to happen with potentially disastrous results). However, it is important to judge both the severity and the likelihood independently. Having identified the numerical risk factor, the 'risk matrix', will help determine the urgency of the action.

RISK ASSESSMENT MATRIX

		POTENTIAL SEVERITY (S)				
		1	2	3	4	5
LIKELIHOOD (L)	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

Risk Level Guidance	
	High Risk – Intolerable - Action required immediately
	Medium Risk – Unacceptable - Remedial action required within reasonable timescales
	Low Risk – Tolerable – Little or no action required
<i>Detail regarding necessary activity can be found within the relevant 'Remedial Action Plan'</i>	

Section 9: The Review Process

In relation to general Risk Assessment, the Management of Health and Safety at Work Regulations 1999 (MHSWR) details the legal requirements. Specifically, section 3 (3) specifies when the assessment should be reviewed.

(3) Any assessment such as is referred to in paragraph (1) or (2) shall be reviewed by the employer or self-employed person who made it if—

(a) there is reason to suspect that it is no longer valid; or

(b) there has been a significant change in the matters to which it relates; and whereas a result of any such review changes to an assessment are required, the employer or self employed person concerned shall make them.

Part 2 of the Regulatory Reform (Fire Safety) Order 2005 (RRO) (specifically section 9.3) requires that fire risk assessments be reviewed on a regular basis. It also reiterates the general principles of review from the MHSWR 1999, where it states in 9.3.(a) and (b) that in addition to the normal regular review, that specifically they should be reviewed when there might be a reason to suspect the assessment is 'no longer valid' (for example following a fire related incident, or near miss) and it is also to be reviewed following any significant changes (e.g. building works, notification of changes in occupancy - significant increase in numbers, disabled etc).

Paragraph 18.1 of the RRO further specifies that the Responsible Person (i.e., Directors/Managing Agents in the case of residential blocks) must appoint one or more 'Competent Persons' to assist them in 'undertaking the preventative and protective measures' necessary to comply with the legislation. A 'Competent Person' is further defined in Section 18 (5) as someone with the appropriate, training, qualifications, experience and other qualities necessary to properly assist in undertaking the preventative and protective measures necessary.

Given the risk factors associated with residential buildings (sleeping risk, multi-occupied, multi-storey, potentially vulnerable occupants etc etc), It is generally considered that the competency element for full fire and general safety risk assessments could only really be satisfied through the use of a suitably qualified and experienced safety professional.

It is also important to consider the difference between a 'review' and a 'full' assessment. It is possible that a simple 'review' can be conducted by persons with less specific knowledge of the standards required, as in practice this will generally involve checking on the progress of previously identified action points and to ensure that no 'Significant' changes have occurred that would warrant a further 'full' review being completed by a 'Competent Person'. It is simply not acceptable to not conduct 'reviews' or 'full' assessments just because it is felt that there have been no obvious physical changes to the premises. The review process focuses attention back on remaining risks and there may also have been some changes, such as occupancy related issues that have affected safety (vulnerable persons for example). Existing precautions can also deteriorate over time.

In relation to the 'full assessment' and 'review' process it is also appropriate for the 'Responsible Person(s)' to consider how they may demonstrate 'Due Diligence', (should the need arise), if a significant fire and/or general safety related incident were to occur within a building for which they were legally responsible and which ultimately resulted in enforcement action and potential criminal proceedings being taken against them. A formalised and structured review process utilising 'Competent Person(s)', in line with generally accepted principles, should constitute a reasonable defence.

Section 10: References

The following is a list of the reference documentation that may be considered as 'Benchmark Standards' and which have, where relevant, been referred to within this assessments audit. The list should not be taken as exhaustive, as there are many more statutory provisions and guidance documents which have a relevance to the management of health and safety:

Main Fire Safety Guidance Applicable:

- ❑ Department for Communities and Local Government (DCLG) guide - Fire Safety Risk Assessment , Factories and Warehouses, Transport premises and facilities

General Regulations and Standards:

- ❑ Building Regulations 2000 Approved Document B
- ❑ British Standard 5588: 2004 Fire Precautions in the Design, Construction and Use of Buildings
- ❑ British Standard 5839: 2004 Fire Alarm Systems and Associated Equipment
- ❑ British Standard 5266: 2005 Emergency Lighting Systems
- ❑ British Standard EN3 and 5306: 1990 Fire Extinguishing Equipment
- ❑ British Standard 5499: 2006 Fire Safety Signs
- ❑ British Standard 8214: 1990 Fire Door Assemblies
- ❑ British Standard 476: 2004 Fire Testing of Structural Elements
- ❑ Furniture and Furnishing (Fire) (Safety) Regulations 1988 (as amended 1993)
- ❑ Dangerous Substances and Explosive Atmosphere (DSEAR) Regulations 2002
- ❑ British Standard 6651:1999 COP for the Protection of Structures against Lightning
- ❑ Disability Discrimination Act (DDA)1995 (as amended by DDA 2005)
- ❑ British Standard 25999:2006 Code of Practice for Business Continuity
- ❑ British Standard 7671: 2008 18th Edition IEE Wiring Regulations
- ❑ British Standard 7650: 1993 Gas Cylinder Safety
- ❑ Construction (Design and Management) Regulations 2007

MAIN LEGISLATION APPLICABLE

- ❑ The Regulatory Reform (Fire Safety) Order 2005
- ❑ Health and Safety at Work etc Act 1974
- ❑ Management of Health and Safety at Work Regulations 1999
- ❑ The Housing Act 2004
- ❑ Electricity at Work Regulations 1989
- ❑ The Smoke-Free (Premises and Enforcement) Regulations 2006
- ❑ Fire and Rescue Services Act 2004