



**Environment and Transport Committee
Executive Committee**

**23 April 2014
5 May 2014**

Non- Aviation Use of Council Owned Aerodromes

ISD-09-14-F

Director of Infrastructure Services

Infrastructure Services Department

1.0 Summary

- 1.1 The purpose of this report is to enable Committee to consider whether they wish to continue to permit the non-aviation use of Tingwall Airport.

2.0 Decision Required

- 2.1 That the Environment and Transport Committee RECOMMEND to Executive Committee that it RESOLVE not to make the Tingwall Airport available for use as a location for motor sports in order to provide the ongoing 24/7 provision of air ambulance.

3.0 Detail

- 3.1 On 3 October 2012 Environment and Transport Committee recommended to the Executive Committee that the Tingwall Airport could be used for non aviation uses including but not limited to Motor Sport events. (Min Ref 23/12). The report was seeking permission to hire out the airports in Council ownership for any purpose that does not interfere with aviation activities or safe airport operations.
- 3.2 The terms and conditions for such events were attached to the report. The terms and conditions have been reviewed and there are a number of inaccuracies and errors which substantially change the consideration about putting in place arrangements for such events. Firstly the terms and conditions indicated that Tingwall Airport will not be operating as a Licensed Aerodrome at the time of any Motorsport Event. This is incorrect. Tingwall Airport is a CAA licensed aerodrome, it will remain a licensed aerodrome even when a motor sport event is occurring. The proposed events would occur outside the published opening times. When Tingwall Airport is closed, it remains a licensed Aerodrome. All landings at Tingwall Airport require prior permission. Tingwall Airport accepts movements outside its operating hours, most particularly from the Air Ambulance. The Air Ambulance should normally give 90 minutes notice of a landing outside the airport opening hours.

- 3.3 The terms and conditions state that:
 “As motorsport events will only take place during periods when the Aerodrome is operating outside its published operating hours, no NOTAMs or AIP Supplements are available”. “The event must have a 30-minute evacuation plan in place. Any member of Shetland Islands Council, HM Coastguard, NHS Shetland, Police or Scottish Ambulance Service, or their agents has the authority to invoke the evacuation plan”.
- 3.4 This information is incorrect. For an event to occur at Tingwall Airport the Duty FISO would need to issue a NOTAM to indicate that the airport is closed and unavailable for use for the period of the event. This would mean that it would be unavailable for all traffic including the air ambulance flights. Therefore holding any event at Tingwall Airport which uses the runway would interfere with aviation activities for the duration of the event.
- 3.5 Correspondence from one of the Airport’s CAA inspectors is attached as Appendix 1 which indicates that whilst other small airports like Stornoway have held motorsport on their sites, it has not been on their runway. This clearly advises that the Council must follow the NOTAM procedure and make the aerodrome unavailable for use.
- 3.6 The Air Ambulance service pays 4 members of staff to be on standby to ensure that Tingwall Airport is available 24/7 year round. They also pay call out and overtime for staff to attend when they use the airport, as well as landing fees and purchase fuel, if required. The tables below show the usage by the Air Ambulance Service over the last two years. Whilst this shows low numbers of call outs at weekends each event is a medical emergency.

2012	Within hours	Outwith hours	Total
Mon -Fri	53	16	69
Sat	2	2	4
Sun	0	3	3

2013	Within hours	Outwith hours	Total
Mon -Fri	27	19	46
Sat	0	2	2
Sun	0	5	5

- 3.7 There are a number of other concerns highlighted in the attached risk assessment in Appendix 2. In particular this highlights the risk of damage to the runway surface, which would make it unavailable for use by the islander at the end of the event. The Tingwall Airstrip is deteriorating, the annual friction test shows degradation of the surface and its use for a motor vehicle event would increase the existing breaking up of the surface. Annual patching and repair is currently

managing to extend the life. Relaying the runway will be required at some point in the future, and the last quotation received several years ago indicated it would cost over £150,000. Increasing usage of the runway would shorten the current lifespan. Roads engineers have inspected the runway and indicate the surface is showing signs of wear. They advise it would definitely be detrimental to the surface if motor racing was allowed on this surface. There is also a concern about tyre deposits and rubber on the runway after the event. The risk assessment also raises the concern about holding an event on a site with a large store of aviation fuel and the arrangements required to manage spectators and participants away from this area and achieving managing the event as a no smoking event.

- 3.8 The Shetland Motor Sport Club has provided their response on the risk assessment. They have proposed additional controls which they believe would manage the risks set out in the risk assessment. Their correspondence is attached as Appendix 3.

4 Implications

Strategic

- 4.1 Delivery On Corporate Priorities - Tingwall Airport is part of the Council's key strategic Transport Infrastructure which is a corporate priority, using the airport for non-transport purposes creates additional risks which could impact on its operational capacity to maintain availability for scheduled traffic.

- 4.2 Community/Stakeholder Issues - Island Communities have highlighted the importance of maintaining the provision at Tingwall Airport, using the airport for non transport purposes creates additional risks which could impact on its operational capacity to maintain availability for scheduled traffic. This would substantially impact on the island communities if the airport was unavailable for any length of time.

Some of the neighbours at Tingwall Airport remain unhappy about the unacceptable impact of the motor sport event noise.

The Motorsport Club has been unable to find a suitable venue for their events and would like to use Tingwall Airport. It is a popular activity with 131 registered members in the club.

- 4.3 Policy and/or Delegated Authority - In accordance with Section 2.3.1 of the Council's Scheme of Delegations, the Environment and Transport Committee has responsibility for discharging the powers and duties of the Council within its functional areas.

The alternative use of Council assets is a matter delegated to the Executive Committee therefore a decision not to make the Tingwall Airport available for use as a location for motor sports requires a decision of the Executive Committee.

- 4.4 Risk Management –A risk assessment has been undertaken and has been attached at Appendix 1. This highlights the risk of damage to the

runway, other equipment and the increased risk in holding events for the public in areas where there is a store of aviation fuel.

- 4.5 Equalities, Health And Human Rights – Tingwall Airport being unavailable to the air ambulance for a period of time would have an impact on the speed of response for a medical emergency. Whilst Sumburgh Airport is available this increases travel times to hospital and Ambulance resource allocated to travel to and from Sumburgh is unavailable to respond to another incident for longer.
- 4.6 Environmental –there have been noise complaints from previous motor sports events held at Tingwall Airport.

Resources

- 4.7 Financial - The proposal for the use of Tingwall Airport for motor sport events would provide additional income. However by closing the airport this prevents any income potential being generated by air traffic, such as Air Ambulance flights. Making Tingwall Airport unavailable to the Air Ambulance by reducing from the guaranteed 24/7 provision may result in reduction in the overall usage by the Air Ambulance reducing annual income. The Council received £33,870 income to date from landing fees, fuel, staff overtime and standby payments due to the Air Ambulance use of the airport in 2013/14. The previous motorsport event at Tingwall Airport provided £722.40 income. This is clearly insufficient additional income to risk the loss of the Air Ambulance contract.
- 4.8 Legal - As airport operator the Council must comply with CAA licensing requirements.
- 4.9 Human Resources - N/A
- 4.10 Assets and Property - There is a risk that the increased use of the runway during motor sport events would reduce the surface friction of the runway and increase the speed of deterioration of the asset. Roads engineers have inspected the runway and indicate the surface is showing signs of wear. They advise it would definitely be detrimental to the surface if motor racing was allowed on this surface.

5.0 Conclusions

- 5.1 Previous reports on the use of Tingwall Airport for non-aviation events did not consider the need to close the airport to traffic during the event. This report seeks a decision on whether to close the airport to enable these non aviation events to happen which would impact on the airport being retained available for use by the Air Ambulance in a medical emergency.

For further information please contact:
Maggie Sandison, Director Infrastructure Services
01595 744841, maggie.sandison@shetland.gov.uk
14 April 2014

Appendices

Appendix 1 – Correspondence from CAA Inspector

Appendix 2 – Risk Assessment

Appendix 3 – Shetland Motorsport Club response

FW: Comments from John Muir - CAA Inspector - Motorsport Event

fiona.farquhar@shetland.gov.uk

Sent: 29 November 2013 10:36

To: Fiona Farquhar

-----Original Message-----

From: Muir John [<mailto:John.Muir@caa.co.uk>]

Sent: 22 November 2013 09:13

To: Farquhar Fiona@Infrastructure Svcs; Murney Tommy

Subject: RE: Query - Motorsport event

Fiona

I am aware of the SYV events and as you have been advised they do not use their runway, they use the parallel taxiway. However, motor sports event do take place on airfields, Edinburgh recently held one on their cross runway (much bigger and stronger surface than yours). We have no input to make as this is a decision for the council to make based on (I assume) a risk assessment identifying the possible damage and risk to operation of the airport in the event of the runway being unavailable for scheduled traffic on reopening. The security and access to your assets is also down to yourselves. Obviously the airport would be closed and NOTAMED as unavailable and what activities would be going on would be for the council to decide. Other than any comment from Tommy I have to leave the decision to yourselves and advise us of the outcome of any discussions.

Regards

John

-----Original Message-----

From: Farquhar Fiona@Infrastructure Svcs

[<mailto:fiona.farquhar@shetland.gov.uk>]

Sent: 21 November 2013 16:06

To: Murney Tommy; Muir John

Subject: Query - Motorsport event

Hi John / Tommy

I hope you don't mind me emailing you but I am currently looking at a request by a Motorsport Group looking to use our runway for an annual event. We had initially declined this request due to various issues but the Group have since gone to Councillors who have requested we revisit this request.

Stornaway have kindly sent me a lot of information relating to their events but their main concern was that the request was to use our runway where they do not.

I have also contacted Petet Grant who recently undertook our friction test to see if this would have an impact.

Another concern I have is the recent works we have undertaken on runway which includes - tar patching, work on clear and graded and also ditching works - other planned works include more tar patching and repainting 20 02 and centre lining

Other concerns I have is safety relating to proximity of fuel storage etc

I wondered if you were able to comment regarding your views or advise in relation to this request

Many thanks

Fiona

SHETLAND ISLANDS COUNCIL



RISK ASSESSMENT SCHEME Tingwall Aerodrome

Risk Assessment No:

Assessment of:

NOTE: For changes to practices and procedures, use the appropriate procedures and forms for the Management of Change, per Aerodrome Manual, Part 5 SMS.

Information Technology Systems	RISK ASSESSMENT	Assessment No:
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Note: Read the Guidance Notes before you proceed with this Assessment

Department	Infrastructure Services	Date Prepared	14/11/2013
Service	Transport	Review Date	01/05/2014
Unit			
Service Manager	Maggie Sandison		
Address	Tingwall Airport.	Tel	

Work Activity Being Assessed	Shetland Motor Sport Race Day	Describe in more detail where this activity takes place:	Runway and Movement areas
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Service Manager's Declaration (Not to be Signed Off until Risk Assessment is Completed)			
Signature of Assessor Name (printed) Date14/11/2013....			
Department/Location ...			
<i>* SERVICE MANAGER TO DELETE AS APPROPRIATE AND SIGN</i>			
*ACCEPTANCE: I am satisfied that the activity may continue		* AN ACTION PLAN is attached at Step 3	
*PROHIBITION: The risk(s) identified are not acceptable without additional control measures in place. I have taken action to prevent the activity continuing.			
Signature of Manager Name Date			
Service/Location			

STEP 1 – How can people get hurt? Use this list as a check and add other items if necessary. Step back and consider any other Hazards. Involve managers and staff in deciding what is to be included. The scope of the hazards listed below is further defined in the 'Worked Hazard Examples' guidance.

HAZARDS

1. Access/Egress	x	11. Food Hygiene		21. Persons Requiring Supervision		How Else Can People Get Hurt (specify below)
2. Animals		12. Hand Tools		22. Pressure Systems		
3. Asbestos		13. Hazardous Substances (COSHH)		23. Slipping, Tripping, Falling		
4. Confined Spaces		14. Heights (inc ladders, scaffolding)		24. Storage (Racks, shelves etc)		
5. Construction Work		15. Lifting Equipment		25. Transport (FLT's, vehicles inc private)	x	
6. Display Screen Equipment (DSE)		16. Lone Working		26. Violence (Assault and verbal abuse)		
7. Electricity (inc portable appliances)		17. Manual Handling		27. Weather (Lightening/wind/rain/visibility/snow)		36. Other Hazards- e.g. physical exertion, work near water etc.
8. Fire (building fire safety)	x	18. Medication Error		28. Working Environment (inc temporary workplaces)	31	Security of Council/Airport buildings
9. First Aid		19. Noise Exposure		29. Working Patterns / Work Organisation (inc Stress)	32	Vandalism/ unauthorised access to VCR / Fire bay
10. Flammable Materials	x	20. Office Equipment		30. Workshop Equipment		

- A more detailed assessment may be required for hazards shown in bold

Groups Particularly at Risk:

The presence of any of the following groups may affect the level of risk (due to vulnerability, lack of knowledge etc) associated with the hazards you have identified above. Extra safety controls may be necessary. Indicate all the groups relevant to this risk assessment. (Contact Safety Section for further advice if needed).

Children (inc unauthorised access)		Contractors / Sub-contractors / Staff from Other Departments	
Pregnant Women and Nursing Mothers		Individuals with disabilities or medical conditions	
New Employees		Members of the Public	x
Young, Inexperienced Workers		Other (please specify)	

Information Technology Systems		RISK ASSESSMENT				Assessment No:		
STEP 2 – Transfer the details of the hazards identified in Step 1. Now assess the risks from the hazards identified on the previous page by completing the form below. (Copy this page as many times as necessary to assess all of the hazards)								
No.	What could cause HARM? (List here the things you have noted on the previous page)	WHO might be Harmed and HOW? (Always give particular consideration to people with special needs)	EXISTING CONTROL MEASURES What do you do already to stop these people getting hurt?	EXISTING RISK (use Table 1 to help)				FURTHER ACTIONS REQUIRED (Yes/No)
				Severity	Likelihood	Score	High Medium Low	
1	Access egress from movement area	Collision with motor vehicle and pedestrian	<p>During operation hours the following controls apply ;</p> <p>Security barrier in position to prevent unauthorised access to airside zone controlled remotely by duty FISO.</p> <p>All vehicle drivers must report to duty FISO to receive induction on airside driving where necessary and be issued with appropriate permits where necessary before being allowed airside.</p> <p>All vehicle drivers issued with radio and assigned a call sign before going airside in order to prevent incursions and ground prox incidents.</p> <p>STRICT INSTRUCTIONS NOT TO ENTER RUNWAY UNTILL PERMISSION GIVEN BY FISO. Drivers to vacate runway when instructed to do so by FISO and report when they have vacated and by which holding point.</p> <p>FISO responsible for control of aircraft and vehicle movements on the apron and must be aware of all vehicle positions and intentions. Good radio communications essential, all FISO's hold current Radio Operators Certificate of Competence.</p> <p>Vehicles fitted with obstruction lights to warn others of their presences. Where not fitted running lights and hazard warning lights must be used.</p> <p>MOR to be completed in the instance of unauthorised access to airside zone</p>	5	1	5	Low	No

1	Access egress from movement area	Collision with motor vehicle and pedestrian	<p>Out with operational hours the movement areas are locked and secured to prevent access in order to preserve the integrity of the facility for the safe operation of air services.</p> <p>Holding a motor sport event would necessitate the following control measure being implemented;</p> <p>All persons involved being inducted to Tingwall being made aware of key safety issues together with areas out of bounds.</p> <p>Shetland Motorsport Club must provide safety barriers to separate spectators and vehicles as well as cordon off areas considered out of bounds to competitors, the out of bounds area include all fuelling areas and access areas to RFFS building. These barriers should be of a suitable construction as to prevent persons climbing over them.</p> <p>Event marshalling must be in place throughout the day to ensure proper control of spectators and movement of vehicles.</p>	5	1	10	Low	
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8	Vehicle fire	<p>1, Drivers/spectators injured through contact with fire/ trapped in vehicle</p> <p>2, Fire and explosion of AVGAS fuel storage facility through vehicle collision/fire or discarded cigarette</p> <p>Serious consideration should be given to the fire fighting provision required for the activity as outside of operational hours there will be no airport fire cover unless staff are called in for a SAS flight together with the fact that ARFFS staff are not trained and competent in tackling vehicles fires so would not be available to provide cover for any event.</p> <p>For an event of this nature the organising group must be able to demonstrate that they are able to provide a suitable level of fire fighting cover to deal with a worst case scenario fire event.</p> <p>A reliance on the Local authority RFFS for event cover would not be deemed sufficient due to the remote location of the airport, the heightened risk of fire and explosion with the storage of large quantities of aviation fuel and the increased time it would take for appliances to be on site before dealing with any incident.</p> <p>Further to the above it must be noted that any vehicle fire no matter how small would result in the airport being declared closed until a full inspection is carried out and confirmed that there are no areas damaged affecting the safe operation of the airport. If areas have been damaged they must be properly repaired before reopening the airport. This process even just an inspection results in a cost to the council that would not normally be incurred.</p> <p>Declaring the airport closed for any reason automatically initiates a formal investigation process which would have a significant cost implication for the airport and impacts on the current drive to reduce operational costs.</p>	With the information detailed in the previous column in mind the risk to person's safety and the safety of airport facility must be considered unacceptable without the provision of adequate rescue fire fighting service.	3	4	12	High	
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10	Flammable materials	<p>Fuel and or oil Spillages from damaged vehicles</p> <p>Areas that have been subject to significant fuel spillage must be subject to thorough cleaning and inspection to ensure the runway surface has not been damaged by the fuel and is still safe to use.</p> <p>Any damage requiring the airport to close would impede Tingwall's ability to conduct all inter island flight as well as Scottish ambulance flights, Search and Rescue flight as well as commercial and general aviation flights severely.</p> <p>As well as the financial implications of loss of revenue and repair costs this would necessitate the submission of an MOR and will incur a full investigation by the CAA as to the circumstances surrounding the MOR and may result in the revocation of the CAA aerodrome licence.</p>	With the information detailed in the previous column in mind the risk to person's safety and the safety of airport facility must be considered unacceptable without the provision of adequate rescue fire fighting service.	4	3	12	High	
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25	Transport	<p>Damage to Runway Surface.</p> <p>Due to Fire and due to excessive wheel spin/power take off, hard breaking and cornering, object falling from moving vehicles.</p> <p>Fire damage to Apron or Runway surface.</p> <p>Consideration should be given to the risk of fire damage to the runway, fuelling areas and the Apron area as a result of a vehicle fire.</p> <p>It should be noted that due to the nature of the proposed event that the vehicles used may well be modified to improve performance and speed. The Council has no way of knowing if any modification has been carried out by a competent engineer and any modifications are completed to a recognised standard of safety.</p> <p>This degree of uncertainty must lead the Council to increase the risk of an occurrence happening in order to fully rate the risk of an incident and the potential damage.</p> <p>Any fire damage to the surfaces of the runway and apron no matter how small would result in the manoeuvring area being rendered unsafe and result in the closure of the airport.</p> <p>Any damage requiring the airport to close would impede Tingwall ability to conduct all inter island flight as well as Scottish ambulance flights, Search and Rescue flight as well as commercial and general aviation flight severally</p> <p>As well as the financial implications of loss of revenue and repair costs this would necessitate the submission of an MOR and will incur a full investigation by the CAA as to the circumstances surrounding the MOR and may result in the revocation of the CAA aerodrome licence.</p>	<p>This risk should be unacceptable due to the potential for damage and the high cost of un-serviceability, repair and revalidation to the council.</p>	3	4	12	High	
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25	Transport	<p>Due to excessive wheel spin/power take off, hard breaking and cornering, or object falling from moving vehicles.</p> <p>Shetland Islands Council as licence holder for Tingwall Airport has a responsibility to ensure the airport is maintained in a safe and effective state for the safe operation of flights.</p> <p>Any deposits of tyre rubber due to wheel spin will be classed a contamination of the runway and or apron area. This will need to be removed before any flight operations can commence</p> <p>Hard acceleration, breaking and cornering will exert significant stress to the slurry coating on the runway surface more than would be expected during daily operations. This may result in significant damage to areas of the runway surface rendering the runway unserviceable for the use of aircraft. This will severely hamper interisland flights together with and emergency flight operations for the SAS.</p> <p>As detailed above any damage requiring the airport to close would impede Tingwall ability to conduct all inter island flights as well as Scottish Ambulance flights, Search and Rescue flights as well as commercial and general aviation flights severely.</p> <p>As well as the financial implications of loss of revenue and repair costs this would necessitate the submission of an MOR and will incur a full investigation by the CAA as to the circumstances surrounding the MOR and may result in the revocation of the CAA aerodrome licence.</p>	<p>This risk should be unacceptable due to the potential for damage and the high cost of un-serviceability, repair and revalidation to the council.</p>	3	4	12	High	
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25	Transport	<p>Damage to Airfield runway lighting.</p> <p>If any driver was to lose control of his/her vehicle during a high speed run they may cause damage to the runway Air Ground Lighting(AGL)</p> <p>Loss of any part of the AGL would severely impact the safe operation of flights to and from Tingwall necessitating a closure of the airport with the consequences as detailed above.</p> <p>Shetland Motor Sport will not have the ability to repair any damage to the AGL as it is specialist lighting equipment serviced by a competent contracted engineering company.</p> <p>The Shetland Islands Council should not accept any risk onto its properties that it cannot control. Accepting the risk even if properly insured would, in the event of damage to the AGL, result in the SIC having to finance any repairs primarily in order to get the facility operational again.</p> <p>Recouping the cost of any repair would be time consuming and costly with a good chance that not all the cost would be recouped, leaving the public purse at a deficit.</p>	<p>This risk should be deemed unacceptable due to the increased potential for damage and incurrence of cost to the Council which may not be recovered.</p>	4	3	12	High	
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25	Transport	<p>Damage to Vaisala Triple head barometer station</p> <p>Loss and or Damage to the Vaisala barometer station would have a serious negative impact on the operations of Tingwall airport.</p> <p>The necessity for the Flight Information Service (FIS) to accurately measure and transmit the barometric pressure readings to aircraft is an essential part of the FIS delivered to aircraft using Tingwall.</p> <p>Although the airport FIS has access to 2 android stand by barometers for back up to the digital metering station, this should not be deemed a reliable alternative, as they are just for back up and not primary use.</p> <p>As above the Shetland Motor Sport will not have the ability to repair any damage to the Vaisala as it is specialist calibrated measuring equipment serviced by a competent contracted engineering company.</p> <p>Shetland Islands Council again would have to foot the initial repair and installation cost of repair and replacement of any damaged units, together with the cost of recouping this money.</p>	This risk should be deemed unacceptable due to the increased potential for damage and incurrence of cost to the Council which may not be recovered.	3	3	9	Medium	
25	Transport	Broken down vehicles in the movement area leading to an obstacle to traffic and air traffic.	Shetland Motor Sport must provide recovery equipment to remove any broken down vehicles from the movement area.	2	3	6	Low	

31	Security of Council/Airport buildings	Damage to airport building and facilities	<p>Holding a motor sport event would necessitate the following control measure being implemented;</p> <p>All persons involved being inducted to Tingwall being made aware of key safety issues together with areas out of bounds.</p> <p>Shetland Motorsport Club must provide safety barriers to separate spectators and vehicles as well as cordon off areas considered out of bounds to competitors, the out of bounds area include all fuelling areas and access areas to RFFS building. These barriers should be of a suitable construction as to prevent persons climbing over the.</p> <p>Event marshalling must be in place throughout the day to ensure proper control of spectators and movement of vehicles.</p>	3	2	6	Low	
31	Security of Council/Airport buildings	Damage to boundary fences leading to a security risk.	<p>Holding a motor sport event would necessitate the following control measure being implemented;</p> <p>All persons involved being inducted to Tingwall being made aware of key safety issues together with areas out of bounds.</p> <p>Shetland Motorsport Club must provide safety barriers to separate spectators and vehicles as well as cordon off areas considered out of bounds to competitors, the out of bounds area include all fuelling areas and access areas to RFFS building. These barriers should be of a suitable construction as to prevent persons climbing over the.</p> <p>Event marshalling must be in place throughout the day to ensure proper control of spectators and movement of vehicles.</p>	3	2	6	Low	

32	Vandalism/ unauthorised access to VCR / Fire bay and fire fighting equipment	<p>Person committing acts of vandalism</p> <p>Person gaining unauthorised access to airport building whilst unmanned.</p> <p>Persons discharging fire extinguishers maliciously</p>	<p>VCR is fitted with a magnetic lock operated by a security fob issued to staff. During operational hours unauthorised person must ring door bell and identify themselves before being granted access to the VCR.</p> <p>Out with operational hours the VCR is double locked with both the magnetic lock and 3 point door lock system.</p> <p>All out buildings and fuel yardage are locked and secured by the means of security locks and high fencing with barbed wire on the top.</p> <p>All ATS documents and moneys are kept locked in the safe and filing cabinets to prevent unauthorised access.</p> <p>All airport equipment buildings and fixtures will need to be checked by staff to ensure nothing has been tampered with. This inspection will be over and above the normal operation of the airport and will incur a cost which must be changed to an event.</p>	4	2	8	Medium	
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Information Technology Systems	RISK ASSESSMENT	Assessment No:
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STEP 3 – ACTION PLAN - Transfer the details of the hazards requiring further action, as identified in Step 2. **Now complete the Action Plan form below.**

No.	What FURTHER ACTIONS are required to reduce the risks to the lowest level reasonably practicable?	WHO is RESPONSIBLE for ensuring these actions are carried out?	WHEN must these actions be completed?	SIGN & DATE when actions completed		RESIDUAL RISK (All controls in place)			
				SIGN	DATE	Severity	Likelihood	Score	HIGH MEDIUM LOW

Table 1 Classification of Risk

Risk Analysis/Priority of Action Matrix – Operational and Safety Risk Assessments

SEVERITY	LIKELIHOOD					
	S E V E R I T Y	1 Extremely Improbable	2 Extremely remote	3 Remote	4 Reasonably Probable	5 Frequent
	Qualitative definition	Should virtually never occur	Very unlikely to occur	Unlikely during the total operational life of the system	May occur once during total operational life of the system	May occur several times during operational life
	Quantitative numerical definition	< 10-9 per hour	10-7 to 10-9 per hour	10-5 to 10-7 per hour	10-3 to 10-5 per hour	1 to 10-3 per Hour
	Quantitative annual/daily equivalent (approximate)	Never	Once in 1000 years/ once in 100,000 yrs	Once in 10 years to once in 1000 years	Once per 40 days to once in 10 years	Once per hour/ once in 40 days
(5) Negligible <i>(No visible injury – no pain)</i>	1	1 Low	2 Low	3 Low	4 Low	5 Low
(4) Slight <i>(Minor cuts, bruises – no long term effects)</i>	2	2 Low	4 Low	6 Low	8 Medium	10 Medium
(3) Moderate <i>(Heavy bruising, deep flesh wound. Lost time accident)</i>	3	3 Low	6 Low	9 Medium	12High	15 High
(2) Severe <i>(Lost time accidents and major injuries)</i>	4	4 Low	8 Medium	12 High	16 High	20 High
(1) Very Severe <i>(Long term disability or death)</i>	5	5 Low	10 Medium	15 High	20 High	25 High



Michael Owen
Chairman

~~Wastley~~

~~Cunningburgh~~

~~ZE2 9HB~~

Dear Alan

I am writing to you to update you on our current situation with regards to the Shetland Motorsport Club.

We had an informative meeting with Maggie Sandison on Thursday the 16th of January where we discussed in detail her concerns about our usage of the Tingwall Airstrip for our Motorsport events.

We are led to believe that Maggie is going to put her risk assessment in front of you as she made us aware that it wasn't her overall decision to let us use/ not use the Tingwall aerodrome.

We have met as a committee and have looked through the risk assessment and wanted to give our opinion and suggested controls on the different matters the assessment has highlighted.

Many thanks

Michael Owen
Chairman

~~Wastley~~

Attachments 4 pages

Access egress from Movement area

Collision with Motor Vehicle and Pedestrian

- **Security barriers** Control measures such as secured barriers are already in place for normal airport security, these would restrict access for non members and any Non member spectators. All FISO instructions and advice will obviously be adhered too
- **Inductions** on Airside driving will be welcomed so all club members are aware of any Risks and the FISO's requirements while on site
- **The issuing of Permits** to each club member isn't practical and we don't see how it increases the safety of club or staff members. All Club members will be inducted and accounted for by the duty FISO with head counts being maintained for event numbers.
- **Radios and call signs** All vehicle drivers being issued with air band radios and call signs would also be impractical and hugely expensive, available UHF radio's could be carried by marshals if the Airfield can supply them however all individuals transmitting on Air band frequencies would need to be adequately licensed trained and certified by the CAA.
- **Access** to the runway will strictly be controlled by the FISO however if this was delegated to a Marshal Evacuation could be swiftly and safety completed without question at the FISO's request.
- **Vehicle and Aircraft Movements** will be in a controlled and conducted in a planned manner obviously aircraft will be put at risk in anyway but would not be expected to move until all motor vehicles had left the area. For the FISO to be aware of 'all vehicle positions and intentions' is very difficult to police. All club members marshals can be provided with club radios while on the airstrip but could not practically all be provided with radio's on the Apron.
- **Vehicle obstruction lights** would not be practical for road going vehicles however hazard lights can be used.
- **MOR** Mandatory occurrence reports can be avoided with properly inducted and informed club members, marshalling will prohibit unauthorised access to the air-side zone.
- **Outwith Operational hour security** we have been informed the Airport will require manning while we are present so do not see this as an issue
- **Safety Barriers** to control spectators and vehicles to cordon off area's can easily be achieved however the easiest means of this is high visibility ribbon tape – quick to set and disassemble however causes a blown item risk so we feel is unsuitable. Fuel area's and RFFS buildings will not be used other than for toilet facilities as directed by the duty FISO. Having barriers that are of a suitable construction to prevent people climbing over them requires heavy fencing being carried onto the apron taking substantial time to set up and to take down.
- **Marshalling** we feel as it is a club members only event all members can be marshalled effectively without fencing, any member not respecting vehicle movements or FISO instructions will be removed from the area and the event.

Damage to Runway Surface and Facilities

Due to fire and due to excessive wheel spin/Power take off, Hard breaking and cornering, object falling from moving vehicles

Fire damage to apron or runway surface

- **Damage to Runway Surface** suggesting a 1.5-2 ton vehicle can cause runway damage in excess to that of an Islander Aircraft we find very hard to believe. Britten Norman BN-2B can weigh up to 3 tons loaded and impact the runway at 55mph forcing wheels from 0-55mph instantly.
- **Risk of fire** has been covered above
- **Modified Vehicles** as per the nature of our club many of the Vehicles may be modified however all vehicles remain road legal and have valid MOT's thus all being deemed safe to be used on the road therefore present no increased risk to any other vehicle. Various qualified mechanics are involved within our club and our Committee so qualified mechanics will be on site for any event. Any situation or vehicle that causes concern however small will not be allowed to compete or enter the airfield.
- **Risk of damage and closure** is of great concern to both parties as Shetland residents we all understand the importance of the interisland flight service, Scottish ambulance service, S&R flights as well as commercial and general flights however we do not see why local private pilots are allowed to use these facilities without prior notice or approval both in and out of hours and we are not. Any use of the airstrip introduces hazard but the risk of this can be controlled well within acceptable limits.
- **Excessive wheel spin/power take off** Power take offs are what we are carrying out however no wheel spinning will be permitted on the runway. Hard braking and cornering is not required on a straight long stretch of track as the final line is well within the airstrips length. The braking of any vehicle will be far less severe than an islander aircraft. Any actions that may lead to tyre destruction will strictly be forbidden. All tyres will be road legal prior to any event. Any accidental debris left from tyres will immediately be cleaned up and removed informing the duty FISO. Hard Acceleration will be carried out in the touchdown area of the aircraft an area already exposed and designed for this purpose. Braking will be carried out in the braking zone of the islander aircraft. If the airstrip is fit for purpose then no increased risk should arise.
- **Damage to Airfield Runway Lighting** this risk exists with any vehicle movement within the airfield from Airside vehicles, Aircraft or club members vehicles. Obviously all efforts will be taken to avoid any damage caused but with the current risk a control must be in place where spare items are available and competent contracted engineering companies are available. The financial cost incurred could be met by a successful club with members paying for such events.
- **Damage to Vaisala Triple head Barometer Station.** We have it on good authority that this is actually located within the terminal building so is not exposed to risk at all however the risk to the external weather station exists with any vehicle movement within the airfield from Airside vehicles, Aircraft or club members vehicles. The location of the Station at Tingwall is between the Apron and the runway well clear of where any vehicle traffic would be permitted and any competing vehicle would be doing so away from the station. Obviously all efforts will be taken to avoid any damage caused but with the current risk a control must be in place

Vehicle Fire

Driver spectators injured through contact with fire/trapped in vehicle

Fire and explosion of AVGAS fuel storage facility through vehicle collision/fire or discarded cigarette

- **Fire and Explosion** obviously this is an extremely important concern for both club members and ARFFS staff however suggesting ARFFS staff are not competent in tackling vehicle fires yet suggest local authority RFFS would not be deemed sufficient due to Tingwall's remote location is not practical. If this was the case no vehicles should be allowed on the airstrip at any time for either day to day operations or club events as the risks posed by both are the same. If the SMC was required to provide a suitable level of FF cover to deal with a worst case scenario fire we would need our own fire station crew and specialised equipment.
– We do have highly trained first aiders and fire qualified marshals from various backgrounds be it Marine/Offshore, Aviation and local authority for any initial response. Portable fire fighting equipment will be supplied by the SMC and ready for use.
- **AVGAS** the risks posed by the storage of large quantities of AVGAS should be controlled by the airports own control measures, the presence of mobile club vehicles does not pose an increased threat over the movement of Aircraft and Airside Vehicles. All racing activities are conducted far from the AVGAS storage and is directed away from the storage not towards so no over run or braking risks exist. Speeds within the AVGAS/Apron area will be kept below 10mph or a speed designated by the FISO.
- **Airport Closure due to vehicle fire** this risk is fully understood but is hugely unlikely all vehicles are MOT'd and road legal. No Race fuel or carriage of additional fuel is allowed by the SMC. Portable extinguishers will be on hand for use in any minor incidents should they occur.
- **Smoking** will not be allowed anywhere within the Tingwall Airport as per SIC policy and safety ashtrays will be provided by the SMC for the safe extinguish and collection of Cigarette butts

Flammable materials

Fuel and or oil spillages from damaged vehicles

- **Fuel and/or oil Spillage** approved spill kits will be purchased by the SMC for such incidents all vehicles will be visually inspected prior to being allowed on the Airstrip and obviously any vehicle showing signs of leakage or damage will be removed from the area and the FISO informed.
- **Damage** to vehicles is avoided by keeping any site obstructions to an absolute minimum no car to car contact is controlled with slow Apron speeds and lane separation when on the Airstrip. Each competitor will not be allowed to cross the centre line into the other competitor's lane.

where spare items are available and competent contracted engineering companies are available. The financial cost incurred could be met by a successful club with members paying for such events.

- **Broken Down Vehicles** suitable towing vehicles and equipment will be provided by the SMC
- **Damage to Airport Building and Facilities** the airport building is a building in public use, access by SMC club members will not increase any risk to council property not incurred in daily operations. Inductions will clearly identify out of bounds area's including all fuelling area's and access areas to the RFFS building. As discussed fixed barriers that prevent persons climbing over them can be arranged but incur further risks to the speed in which the airstrip can be returned to an operational condition.
- **Damage to Boundary fences leading to a security risk** no motorsport activity will be conducted anywhere near boundary fences. If any damage is incurred these can be repaired at SMC expense
- **Vandalism/Unauthorised access** SMC club members pose no increased risk of vandalism than any member of the public during club events. Duty FISO and SMC marshals will ensure all club members are inducted and supervised being fully aware of restricted access areas. No acts of vandalism or unauthorised access will be permitted by the SMC and members will be ejected and/or banned from future events if these restrictions are not observed.



**Environment and Transport Committee
Executive Committee**

**23 April 2014
05 May 2014**

Provision of Refuse Sacks to Householders

ISD-08-14-F

Director of Infrastructure Services

Infrastructure Services Department

1.0 Summary

- 1.1 The purpose of this report is to enable Committee to consider whether they wish to discontinue the supply of household refuse sacks free of charge to all householders because this is not a statutory duty and would deliver a financial saving to the Council without a substantial change to service delivery.

2.0 Decision Required

- 2.1 That the Environment and Transport Committee RESOLVE to
- 2.1.1 approve the proposal that householders will no longer be provided with an annual supply of refuse sacks free of charge for the collection of household waste; and
- 2.1.2 to recommend that Executive Committee recommend to the Council that the charge for a box of refuse sacks be reduced from £11 to £3.50.

3.0 Detail

- 3.1 The Council has a duty, as the waste collection authority, to collect household waste at no charge. It is also a duty that waste collection authorities shall specify collection arrangements for household waste and specify the type of receptacle to be used. There is no duty on the Council to supply the receptacle for the collection of household waste. The Council currently supplies each household in Shetland with 52 refuse sacks free of charge, each year.
- 3.2 The total number of households in Shetland is around 10,500. Providing 52 bags to each household requires the purchase of 550,000 bags. This cost the Refuse Service £21,783 in 2013/14. The cost of shipping the bags to Shetland was around £2000. The delivery of the bags to all households across Shetland in 2013/14 took 54 man days with an additional cost for fuel and the vehicles used for the delivery.

The delivery requires an intensive period of activity so the Service has to take on temporary staff to backfill refuse loader/street cleaning posts. Whilst £23,783 does not appear to be a substantial saving for the level of inconvenience stopping this provision may cause to householders, it equates to 1 refuse loader post including all employer's on-costs. There would also be additional savings in the use of temporary staff and transport costs every year. Environmental Services have reduced its staffing compliment as part of the budget savings over the last two years. Stopping non-staffing activities enable staff to focus on statutory provision which is becoming challenging due to reduced resources.

- 3.3 A roll of 50 refuse sacks from the supermarkets in Shetland costs between £1.20-£6.00, depending on the quality of the bags purchased. As Environmental Services will continue to order refuse bags for its own use, it is proposed that refuse bags will continue to be made available for purchase at Gremista Civic Amenity Site. To assist those without their own transport, the bags will additionally be available to purchase from Charlotte House. The charge for a box of 52 refuse sacks is currently £11. It would be proposed that the charge be reduced to £3.50, as this would recover the purchase, shipping, storage and administration costs. In setting this price it is recognised that by buying fewer bags there will be a reduced bulk discount and that shipping costs are increasing. It is also proposed that these refuse sacks could be purchased in bulk by rural and small Lerwick shops to stock and sell at the same price. This would ensure that everyone can purchase these refuse sacks at convenient locations across Shetland.
- 3.4 The Council must specify collection arrangements for household and specify (but not necessarily provide) the type of receptacle to be used. The Council will therefore continue to collect household refuse on a weekly basis and refuse must be presented in a black refuse sack or wheelie bin for collection. Any refuse not presented in this manner may not be collected and the householder will be instructed how to present their waste in future. Ongoing failure to present their waste appropriately could result in enforcement action. The Council currently takes enforcement action by issuing a Fixed Penalty Notice when householders have been warned in writing on at least one previous occasion that their household refuse has given rise to litter.
- 3.5 Infrastructure Services is continuing to review its services to find ongoing savings to meet the target budget in the Medium Term Financial Plan. Part of this process has to be considering where discretionary activities can be stopped or reduced. As the provision of refuse sacks is a discretionary activity, this report provides Members with an opportunity to review whether they wish to make savings from this budget.

4 Implications

Strategic

- 4.1 Delivery On Corporate Priorities - Making spending decisions that realistically reflect the money we have is a corporate priority in order that the Council reduces its spending from reserves.

- 4.2 Community/Stakeholder Issues - Every household in the community will be affected by this decision. However given the scale of the savings that the Council has had to make to date and continue to need to achieve to reduce the draw on reserves the scale of service change will impact negatively on individuals. However refuse collection services will continue to be delivered to each household across Shetland.

By promoting the rural and small Lerwick shops where bags can be purchased this encourages residents to shop locally within their own community.

- 4.3 Policy and/or Delegated Authority - In accordance with Section 2.3.1 of the Council's Scheme of Delegations, the Environment and Transport Committee has responsibility for discharging the powers and duties of the Council within its functional areas. However a decision on the setting of fees and charges is a decision reserved to the Council, having considered a recommendation from the Executive Committee.
- 4.4 Risk Management - Failure to reduce the net ongoing running cost of the Council carries a significant risk of breach of the Council financial policies which will require a further draw on Reserves.
- 4.5 Equalities, Health And Human Rights – There are 1475 income deprived individuals in Shetland (2012 Figures). It is recognised that for the households on lowest income this is an additional £3.50 cost incurred from their annual household budgets which are already stretched, however for the majority of Shetland's households this cost is affordable.
- 4.6 Environmental – It maybe that householders may purchase poorer quality bags which may give rise to litter, however the Council has powers to address issues of poorly presented waste. There will still be a requirement that householders present their waste on the day of collection in a black refuse sack or wheelie bin in a manner which does not give rise to litter. The same quality of bags would still be available to purchase from local shops, the Civic Amenity Site and Charlotte House.

Stopping the delivery of refuse sacks to each household in Shetland will reduce fuel usage and reduce the Council's carbon footprint.

Resources

- 4.7 Financial
This proposal will deliver recurring savings of £23,783 plus fuel and temporary staff backfill costs. The proposal is required to ensure that the Service meets its future budget targets. This is key to ensuring that the Council continues to work towards delivering the Medium Term Financial Plan by reducing non-statutory provision where appropriate.
- 4.8 Legal
The Environmental Protection Act 1990 creates the duty that the Council, as Waste Authority, must collect household waste. There is no duty to provide refuse sacks for waste disposal. Ceasing non-statutory

activities, like the delivery of refuse sacks, enables the Service to focus its reduced resources on statutory provision.

4.9 Human Resources - N/A

4.10 Assets and Property - N/A

5.0 Conclusions

5.1 The Council has previously provided each household in Shetland with free refuse sacks for presenting their household waste for collection. Due to the need to find ongoing savings to achieve the Medium Term Financial Plan it is proposed that refuse sacks will no longer be provided free of charge because it is not a statutory duty to provide them.

For further information please contact:

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11 April 2014



Shetland Islands Council

Environment and Transport Committee

23 April 2014

Carriageway Condition of Shetland's Roads

Report Number: RD-06-14-F

Executive Manager - Roads

Roads
Infrastructure Services Department

1.0 Summary

- 1.1 The purpose of this report is to inform the Committee of the current condition of Shetland's roads.

2.0 Decisions Required

- 2.1 That the Environment and Transport Committee RESOLVE to NOTE:
- 2.1.1 the contents of this report; and
- 2.1.2 the improvement in the overall RCI figure shown in the 2012-14 results and the detailed reasoning behind this improvement in section 3.5.

3.0 Detail

3.1 Road Condition Indicator (RCI)

Audit Scotland's statutory performance indicator (SPI) for road carriageways is 'the percentage of the road network that should be considered for maintenance treatment'. The figure reported for the SPI is a Road Condition Indicator (RCI) produced from machine-based measurements taken during a Scotland wide survey of the road network. The parameters measured are:

- surface texture, helps to provide skidding resistance and indicates surface wear;
- cracking, indicates deterioration of the surface course or more deep seated structural defects;
- rutting, can affect vehicle handling or cause water to pond;
- longitudinal profile, the main factor controlling ride quality and hence user perception and is also a good indication of defects in the road structure.

The former two parameters are usually treated with surface dressing and the latter require a minimum of overlay resurfacing or more expensive reconstruction if the damage has reached the base layers.

3.2 Survey Frequency

The required survey coverage of the road network is detailed in the SPI. The “A Class” roads are surveyed in both directions every two years, that is one direction in one year and the opposite direction the next year. The “B and C Class” roads are surveyed in both directions over a four year period, that is 50% per year in one direction. The unclassified roads have a 10% sample surveyed on an annual basis selected at random by the survey contractor.

While surveys are carried out on an annual basis, the RCI is calculated over two years to minimise the effect of sampling errors on the results.

3.3 Results

The results are categorised into Green, Amber and Red condition bands where:

Green indicates the carriageway is generally in a good state of repair;

Amber indicates the carriageway has some deterioration that should be investigated to determine the optimum time for planned maintenance treatment; and

Red indicates the carriageway has lengths in poor overall condition that are likely to require planned maintenance soon.

The RCI figure includes both the Amber and Red categories so an increase in the figure indicates deterioration in the condition of the road. Table 1 and Graph 1 show how the RCI for both Shetland’s and Scotland’s roads have varied since 2004. The graphs show that although there have been crests and troughs over the years the general trend is a deterioration in the condition of each of our road classifications. The latest trough or improvement is to the condition of our classified roads in recent years.

“A class” Roads

Shetland’s “A class” roads have been and still are in a better condition than the average for “A class” roads in Scotland. The gap between them had reduced from a high of 12.2% in 2007-09 to 4.1% in 2010-12. However, this closing of the figures has slowed then reversed with the latest survey showing that the difference is now 7.6%. This may be because we have been making more use of the survey results to target treatment of the worst lengths of carriageway. Previously more weight was given to the Area Engineer’s opinion and treatment was prioritised accordingly with some consideration given to surveyed skid resistance. The survey results are now used to prioritise the surface dressing and

resurfacing programme although the Area Engineers still have an input and, based on their opinion, roads can be moved up the list.

It is also the case that in recent years the treatment of the “A class” roads has been given even more priority than previously. This achieves a greater improvement of the RCI as the surface dressing of significant lengths of “A class” road is more cost effective than the dressing of shorter lengths of single track road. For example, the extensive overlay resurfacing and subsequent surface dressing of the A968 through Yell will have made a significant contribution to this recent improvement.

“Classified” Roads

While a number of these roads were improved in the 1970’s and 80’s the majority are still single track. In the region of 20% of these are founded on peat that generally has a low load bearing capacity. This can result in uneven, road surfaces, differential settlement, edge deterioration, cracking and eventually disintegration of the bitmac surface. This has always been a problem but the rate of deterioration increased as the number of heavy goods vehicles accessing aquaculture sites and other developments has increased. This is why Shetland’s “B and C class” roads have over the years tended to be in a poorer condition than the Scottish average. The exception was in a period between 2006 and 2010 when their condition significantly improved. In the two years following this period there was a deterioration of approximately 7.5% in the condition of the “B and C class” roads. However, this has also improved recently and these two classes now have a condition figure approximately 2.5% worse than the national average. This improvement is again due to these roads having been given, in recent years, an even greater priority over our unclassified roads.

“Unclassified” Roads

The “unclassified” roads have historically been in a worse than average condition. They did show some improvement recently but have now deteriorated to the point where their RCI is 14.6% worse than the average percentage for Scotland. An even greater proportion of these roads are single-track. They also tend to be narrower than their “classified” equivalent. Therefore, while suffering the same deterioration they are more susceptible to edge damage due to HGV’s or the larger agricultural vehicles now being used. It is likely that their continued decline may be partly due to the classified roads being treated with more priority than was previously the case.

Entire Network

The “all” roads figure for the entire network is now 4.7% worse than the average. The graph shows that the Shetland figure began to diverge from the Scottish average figure in 2009-11 but is now closing again as our figure has slightly improved and the Scottish average has slightly increased. Prior to this the percentage of Shetland’s carriageways that should be considered for treatment was approximately 3% greater than the national average largely due to the relatively poor condition of our

single track unclassified roads. The reduction in funding may have been a contributory factor in the increase from this 3% gap but the main reason for the decline since 2004 is likely to be that the majority of Shetland's "classified" roads were improved in a short period during the early years of the oil "boom." Many are now together after 30 years starting to show signs of deterioration.

Table 1: Road Condition Indicators (RCI) for Shetland and Scotland

	A Class Shetland	A Class Scotland	Classified Shetland	Classified Scotland	Unclassified Shetland	Unclassified Scotland	All Shetland	All Scotland
2004-06	18.3	27.4	27.9	30.4	48.3	41.3	36.9	35.9
2005-07	21.0	28.6	29.7	31.5	48.1	42.8	37.8	37.2
2006-08	19.9	29.2	28.0	32.4	54.6	42.5	40.2	37.4
2007-09	16.3	28.5	26.0	31.8	54.1	36.6	38.3	34.2
2008-10	21.8	29.6	29.9	32.7	51.2	39.4	39.3	36.1
2009-11	24.7	30.5	33.2	33.8	50.3	41.9	40.7	37.9
2010-12	26.4	30.5	35.6	34.5	53.8	38.3	43.7	36.4
2011-13	25.2	29.4	34.2	33.3	53.1	39.0	42.5	36.2
2012-14	21.1	28.7	31.6	33.8	54.0	39.4	41.4	36.7

3.4 Analysis

The survey results show a slight improvement of 1.1% in the condition of Shetland's roads. This is mainly due to improvements of 4.1% and 2.6% in the "A" and "B class" condition figures respectively. This reflects our recent practice of assigning even greater priority to strategic roads when programming maintenance work. Unfortunately, our unclassified roads are continuing to decline at a fairly steady rate. It may be that we should reconsider this practice and treat a greater length of unclassified roads each year.

Relevancy of Long Profile

The majority of Shetland's unclassified roads are single track and made up of a relatively thin layer of mortar and several layers of surface dressing over a peat sub-grade. These were originally shaped by hand and have never seen a paving machine. It should be noted that as a result the longitudinal profile parameter, that forms part of the RCI calculation, is of little practical value when considering roads of this type. While the roads are perfectly serviceable and adequate for the traffic that traditionally used them they will always have a sub-standard profile because they have not been machine laid. We or any other local authority have never been in a position where we could overlay all roads of this type that access only two or three houses. The standard treatment option for roads of this type is patching and perhaps surface dressing if the carriageway is cracked. This is usually adequate but an overlay would be considered if the road was severely rutted or on the point of complete failure. Unfortunately, this level of deterioration is becoming more common due to the larger and heavier vehicles using these roads.

Impact on RCI

Reconsidering our priorities and aiming for an improvement in our unclassified roads is likely to result in a deterioration of the overall RCI. Continuing with our current practice of maintaining the main strategic part of the network will likely give the best result for our current funding position in continuing the slight improvements that have been made to the overall figure. The former option means that in the long term our overall SPI is likely to deteriorate. The latter will continue the decline of our unclassified roads and may in time lead to the failure of road surfaces and the need for even more costly repairs. Unfortunately, there are insufficient funds to address both issues.

Conclusion

Having considered the implications we now consider it appropriate to increase the rate at which we overlay the single track roads that are in poor condition. We generally overlay 1 to 2 roads per year that meet the description of being single track and serving only a limited number of houses. We have been overlaying approximately 3.0 kilometres of "A class," 2.5 kilometres of "B and C class" roads and 0.8 kilometres of unclassified roads each year. Doubling the length of single track that we overlay would eventually improve the RCI for our unclassified roads but because they are only surveyed once every 4 years this will take some time. There are also 374 kilometres of single track unclassified roads in Shetland so treating an additional 800 metres per year will only improve 0.2% of the roads of this type. We will of course continue to monitor the condition of our classified roads and if their deterioration is excessive we will reconsider this change in the distribution of the resurfacing budget.

3.5 Maintenance Backlog

The Society of Chief Officers of Transportation in Scotland (SCOTS) has analysed these surveys and the carriageway maintenance budgets of local authorities to calculate a maintenance backlog figure. The inputs to the backlog calculation are:

- the SCANNER survey data parameters;
- the treatment method for each defect type;
- the treatment costs supplied by each Council; and
- the carriageway lengths and widths supplied by each Council.

The resulting figure is the expenditure required to bring the entire road network of an authority to the acceptable or "Green" condition. The 2013 headline backlog figure to improve Shetland's carriageways to this acceptable condition is £50.5 million. This is a substantial increase from the £20.4 million reported in 2011 and £27.3 million reported in 2010. (The backlog was not reported in 2012).

The large difference between the 2013 and 2010 figure can be partly explained by differences in the items included in the supplied treatment costs. The latest SCOTS guidance requires that a 20% uplift be applied to the unit treatment costs to account for the cost of traffic

management. This was not always made clear so was not included in the 2010 costs. These rates also omitted the cost of resetting manhole covers and other ironwork in the carriageway. This can amount to 10% of the total treatment cost. Therefore, if we add this additional 30% to the 2010 figure the backlog would have been £35.5 million. The road condition has deteriorated from 38.3% in need of treatment in 2009 to 43.7% in 2012. This equates to a £5 million increase in the backlog bringing it to £40.5 million. The remaining £10 million difference may in part be due to an increase in the length of the network that is in a red condition and needs more expensive treatment and a relative decrease in the amber condition that needs a less expensive treatment.

SCOTS have recalculated the 2011 figure using the rates supplied for the 2013 calculation. This yields a backlog figure of £45.7 million. This verifies the latest figure if the 4.4% increase in RCI between the years is taken into account.

“Steady State” Figure

SCOTS developed this concept further and arrived at a figure giving the annual budget required to maintain carriageways in a “steady state” so that they are neither improving nor deteriorating. In 2009 this figure for Shetland was £2.4 million per year. The budget allocated for carriageway treatments in 2009/10 was £2.14 million or 89% of the steady state figure. This budget is £1.66 million for 2014-15. This equates to only 69% of the “steady state” figure from 2009 but as the condition of the carriageways has deteriorated further the gap between the “steady state” and actual budgets will be greater than the 32% indicated. SCOTS have yet to update their “steady state” figures.

The SCOTS financial model can also be used to predict the likely change in Network RCI over the next 10 years for any Scottish Authority by calculating the difference between the “steady state” budget and the settlement expected in future years. Were the 69% figure to be retained for the long term the RCI would be expected to increase by a further 10% in the next 10 years. Were the budgets to be returned to their 2009/10 level at 89% of the “steady state” figure the RCI would only increase by 4%. This may not appear to be a significant difference but the road network is the Council’s most valuable asset, with an estimated gross replacement cost in the region of £1,000M, so even a deterioration of 6% in its condition equates to a reduction in value of tens of millions of pounds.

3.6 Future Road Condition

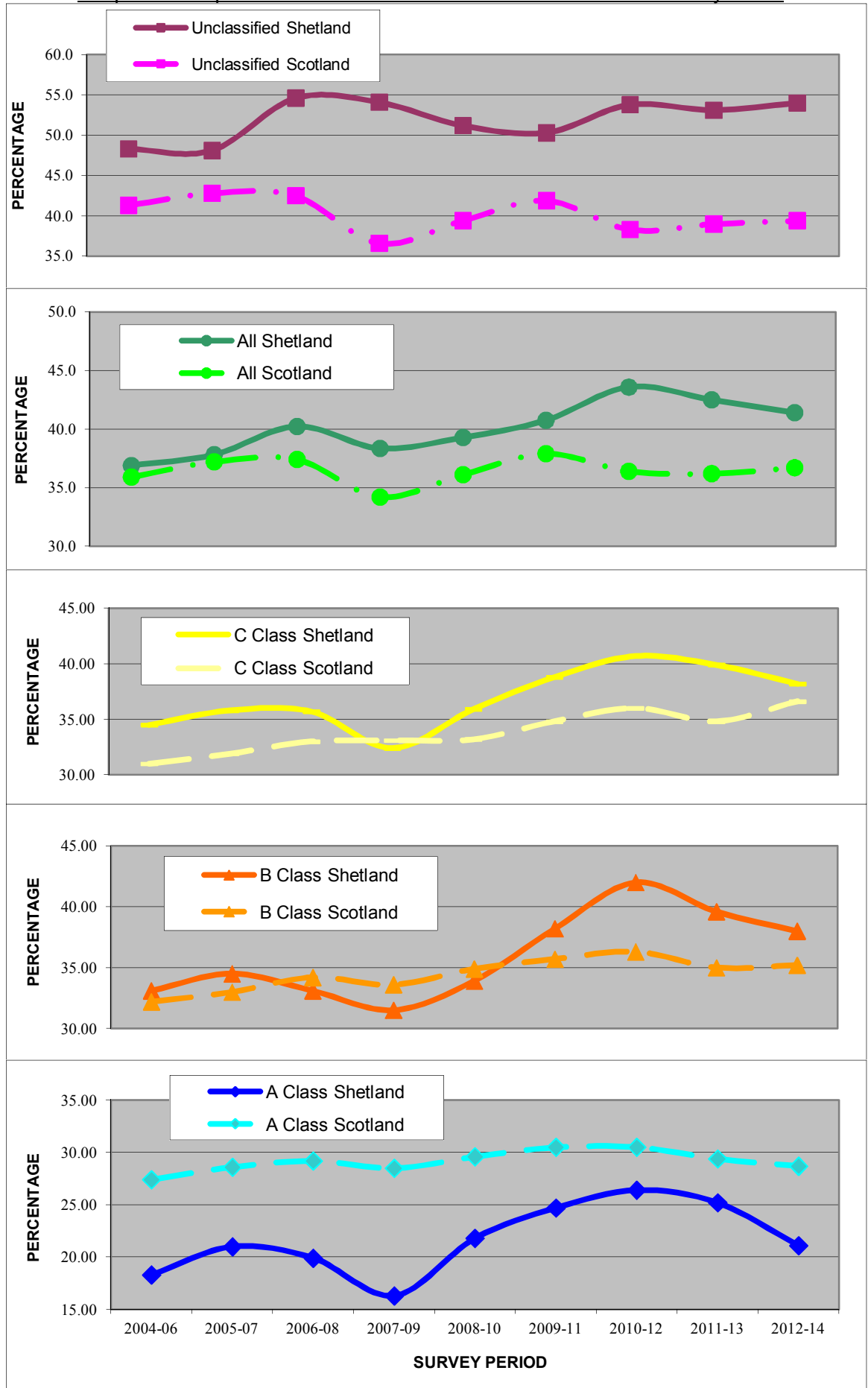
In the current economic climate, there was a need to realign budgets with available resources. Recent reductions to carriageway maintenance budgets will have some detrimental impact on the future condition of the road network. They were initially a relatively small proportion of the £260,000 gap that already existed between spending and the modelled cost of maintaining the network in its current condition. However, these small reductions have accumulated and this financial year we will be spending £740,000 less than the 2009/10

“steady state” figure. This situation will have an appreciable effect on Shetland’s roads, and on the statutory performance indicator, if it continues in the long term. It is vital that planned and preventative maintenance measures, such as surface dressing, are adequately funded in order to avoid much costlier reactive maintenance such as the repair of potholes or deeper failures of the road foundation.

4.0 Shetland Gas Plant

- 4.1 The Council has held a number of meetings with TOTAL regarding the “extraordinary traffic” on the roads in the Central and North Mainland and any damage that has occurred as a result. The Council has been represented by the Director of Infrastructure Services, the Director of Development Services and the Executive Manager of Roads at these meetings. Agreement is being sought for the SCANNER data to be used to ascertain the presence of any damage and assess the level by comparing before and after surveys. To progress the agreement we asked WDM Ltd to undertake the annual survey in March this year. When we get the results from this survey we will be able to assess the damage to date and hopefully reach a final agreement with TOTAL regarding the level of damage and their contribution to the necessary repairs and ongoing maintenance of our roads. It should be noted that this is an area that has historically proven difficult for Authorities to prove and at this stage there is no certainty that we will be successful.
- 4.2 The SCANNER surveys are usually undertaken in July or August so normally the majority of the summer’s surface dressing works are included in the survey. It should be noted that the decision to have the survey undertaken earlier, prior to the summer’s surface treatments, may be reflected in next year’s results.

Graph 1: Comparison of Shetland and Scotland Road Condition by Class



5.0 Implications

Strategic

- 5.1 Delivery On Corporate Priorities – The local outcomes from Shetland's Single outcome agreement include "Shetland stays a safe place to live, and we have strong, resilient and supportive communities." The condition of the carriageway has direct implications for road safety.

A further local outcome that is particularly relevant to carriageway condition is "Our internal and external transport systems are efficient, sustainable, flexible and affordable, meet our individual and business needs and enable us to access amenities and services."

- 5.2 Community /Stakeholder Issues
The condition of the road network will affect its reliability which in turn will impact on stakeholders and the community if there are delays and temporary road closures due to maintenance works.

- 5.3 Policy And/Or Delegated Authority – The Council's Constitution – Part C - Scheme of Administration and Delegations provides in its terms of reference for Functional Committees (2.3.1 (2)) that they:

Monitor and review achievement of key outcomes in the Service Plans within their functional area by ensuring –

- (a) Appropriate performance measures are in place, and to monitor the relevant Planning and Performance Management Framework; and
- (b) Best value in the use of resources to achieve these key outcomes is met within a performance culture of continuous improvement and customer focus.

- 5.4 Risk Management – Failure to manage and maintain the road network will impact on the net ongoing running costs of the Council and therefore carries a significant risk of the Council's financial policies not being adhered to and will require a further draw on Reserves.

- 5.5 Equalities, Health And Human Rights
No implications.

- 5.6 Environmental
No implications.

Resources

- 5.7 Financial – Under the Local Government in Scotland Act 2003, the Council has a duty to make arrangements that secure Best Value. Best Value is continuous improvement in the performance of the authority's functions taking into account efficiency, effectiveness, economy and equal opportunities.

There are no direct implications arising from this report but for Councillors information the combined total carriageway maintenance budget (made up of resurfacing, surface dressing and patching) for each of the past 8 financial years was as shown in the following table.

<u>Financial Year</u>	<u>Resurfacing</u>	<u>Surface Dressing</u>	<u>Patching</u>	<u>Reconstruct</u>	TOTAL
2008/09	665,000	410,000	350,000	290,000	1,715,000
2009/10	1,223,000	477,000	151,000	287,000	2,138,000
2010/11	1,089,000	498,000	350,000	400,000	2,337,000
2011/12	802,000	498,000	325,000	300,000	1,925,000
2012/13	727,000	498,000	368,000	322,000	1,915,000
2013/14	687,000	500,000	362,000	300,000	1,849,000
2014/15	617,000	449,500	325,700	269,000	1,661,200

- 5.8 Legal – None.

- 5.9 Human Resources – None.

- 5.10 Assets And Property – The road network is the largest community asset for which Shetland Islands Council is responsible. It is vital and fundamental to the economic, social and environmental well being of the community. It helps to shape the character of an area, the quality of life of the local community and makes an important contribution to wider Council priorities including growth, regeneration, education, health and community safety. Roads also make a wider contribution to society, providing access to ferry terminals, ports and airports.

6.0 Conclusion

- 6.1 This report is for the Committee, in its monitoring and scrutiny role, to note and comment on the performance indicator for the carriageway condition of Shetland's roads.
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For further information please contact:

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Background Documents

SCOTS Financial Model, March 2010
[http://scots.sharepoint.apptix.net/Lists/Announcements/Attachments/141/170510%20SCOTS%20SRMCS%20Backlog%20\(Public%20Report\)%20V2-2.pdf](http://scots.sharepoint.apptix.net/Lists/Announcements/Attachments/141/170510%20SCOTS%20SRMCS%20Backlog%20(Public%20Report)%20V2-2.pdf)

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