SMSsystems.ca User Manual

SMSystems.ca is a web based service developed to meet the hazard report needs of small to medium sized aviation companies as they prepare for the implementation of the Safety Management System in the Canadian aviation industry.

SMSystems.ca was developed to meet the following demands:

1. An internet based reporting system using internet technology allowing company stakeholders to participate in a company's Safety Management System.
2. Provide an effective means of tracking SMS Reports and Mitigation strategies.
3. Provide a service which allows small to medium sized companies implementation of a Safety Management Report System taking into consideration available administrative resources.
4. Provide tools that companies can use to address the regulatory requirements.

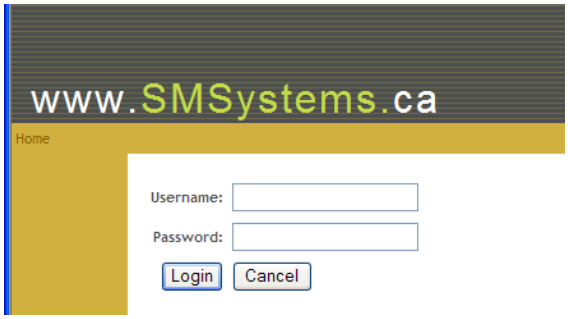
Introduction

SMSystems.ca is a secure hazard reporting and tracking service for aviation companies wishing to implement such a system utilizing the benefits of the internet. **SMSystems.ca** allows employees (and other identified stakeholders) access to their aviation SMS Reporting and Tacking from any computer with internet access using common web browsers

Access to a companies **SMSystems.ca** website is username and password secured and maintained by the company appointed administrator. Users should be encouraged to contact their administrator if they are having difficulty logging into the site. There are several user categories; user, committee member, director, and administrator. Each of these user types has different levels of access to the system:

a. **User** – has access to hazard reporting and tracking system.
b. **Committee Mem**ber – has 'User' privileges and committee privileges including risk evaluation, hazard reporting discussion, and committee member meetings.
c. **Director** – has 'Committee Member' and Hazard Reporting and Risk Mitigation review.
d. **Administrator** – has 'Director' privileges plus the ability to amend records, create, delete, and edit user profiles.

Login



Each company using **SMSystems.ca** will have their own database/website. **SMSystems.ca** will create a database system specifically for your company which can be hosted on SMSystem's server. Your company's assigned Administrator will only have access to your website and **username** and **passwords** will be specific to your company. This is not a common database where all companies subscribing to **SMSystems.ca** will have access to an all encompassing database. For example,

Company XYZ will not be sharing their database with Company ABC. For security purposes users will be logged off the web service if there has been no activity for **30 minutes or more.** When using SMSystems.ca away from company controlled browsers common internet practices such as clearing caches is recommended.

Company Homepage on SMSystems.ca Website

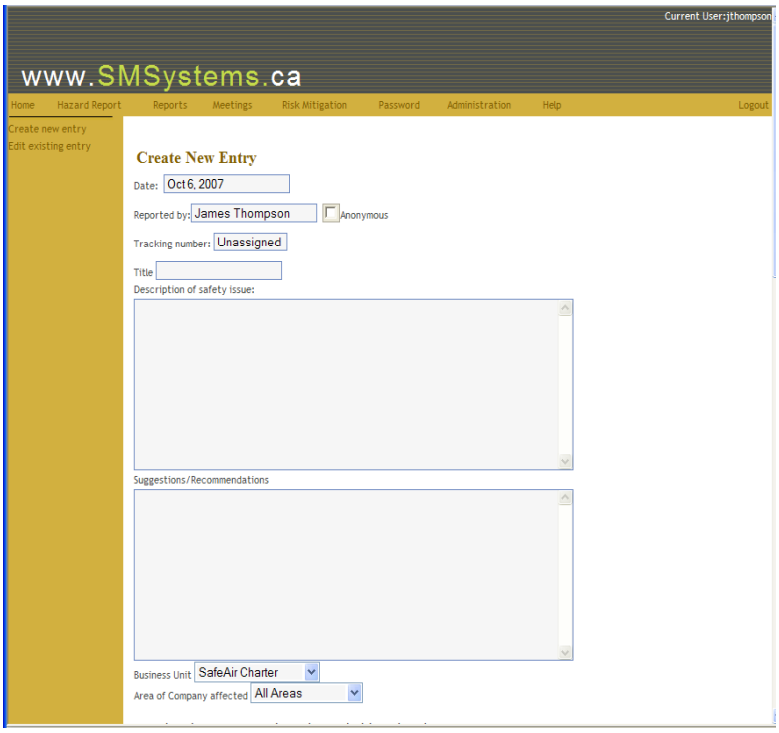
The **SMSystems.ca** homepage is maintained by the company designated administrator. Companies are encouraged to post their Safety Policy on their **SMSystems.ca** homepage. Any goals for the improvement of company aviation safety is also recommended. The homepage includes the;

- **Company Safety Policy**,
- **Accountable Executive**, and
- **Committee List**.

The contents of the Safety Policy, Accountable Executive, and Committee List are maintained by the company's designated administrator.

Reporting System

SMSystems.ca provides the stakeholders of a company a means of identifying hazards to aviation safety which can then be evaluated and managed. The core of the reporting system is the **Hazard Report**.



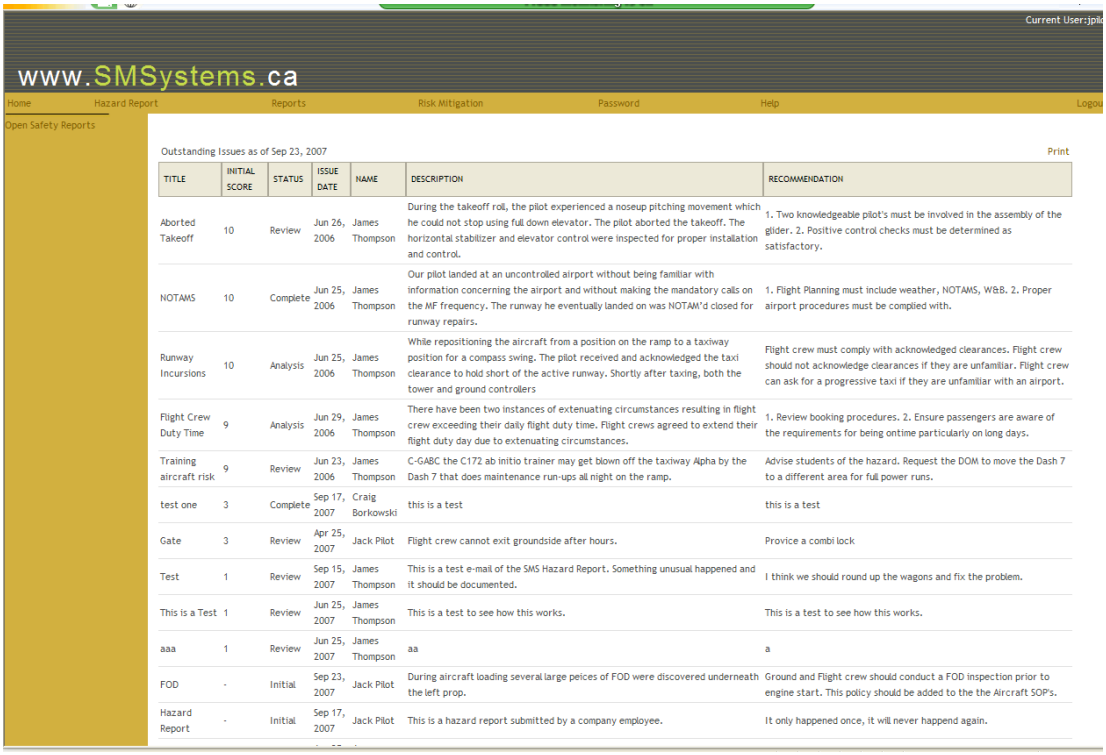
When a user enters a Hazard Report the following information is collected:

1. **Date** Hazard Report issued.
2. **Person** reporting the hazard, and **anonymous option** is available which removes personnel identification from within the report.
3. A **tracking number** is automatically assigned to the report (e.g. **2007-02** etc.)
4. **Description** of the safety issue.
5. **Recommendations/Suggestions** from the reporting person.
6. The **Business Unit** which this safety issue affects. For example, is the safety issue being reported affect the Maintenance Certificate, Air Taxi Certificate, or Commuter Certificate.
7. **Area of Company** affected. Is this maintenance, flight operations, administrative, or an entire company issue.

Once the person entering the hazard report selects the SUBMIT button the report is entered into the database. Verification that the Hazard Report has been entered is done by e-mail. The person who enters the Hazard Report will receive an e-mail as well company committee members.

If the hazard report is submitted anonymously any information identifying the individual is removed from the hazard report.

Safety Reports



TITLE	INITIAL SCORE	STATUS	ISSUE DATE	NAME	DESCRIPTION	RECOMMENDATION
Aborted Takeoff	10	Review	Jun 26, 2006	James Thompson	During the takeoff roll, the pilot experienced a noseup pitching movement which he could not stop using full down elevator. The pilot aborted the takeoff. The horizontal stabilizer and elevator control were inspected for proper installation and control.	1. Two knowledgeable pilot's must be involved in the assembly of the glider. 2. Positive control checks must be determined as satisfactory.
NOTAMS	10	Complete	Jun 25, 2006	James Thompson	Our pilot landed at an uncontrolled airport without being familiar with information concerning the airport and without making the mandatory calls on the MF frequency. The runway he eventually landed on was NOTAM'd closed for runway repairs.	1. Flight Planning must include weather, NOTAMS, W&B. 2. Proper airport procedures must be complied with.
Runway Incursions	10	Analysis	Jun 25, 2006	James Thompson	While repositioning the aircraft from a position on the ramp to a taxiway position for a compass swing. The pilot received and acknowledged the taxi clearance to hold short of the active runway. Shortly after taxing, both the tower and ground controllers	Flight crew must comply with acknowledged clearances. Flight crew should not acknowledge clearances if they are unfamiliar. Flight crew can ask for a progressive taxi if they are unfamiliar with an airport.
Flight Crew Duty Time	9	Analysis	Jun 29, 2006	James Thompson	There have been two instances of extenuating circumstances resulting in flight crew exceeding their daily flight duty time. Flight crews agreed to extend their flight duty day due to extenuating circumstances.	1. Review booking procedures. 2. Ensure passengers are aware of the requirements for being ontime particularly on long days.
Training aircraft risk	9	Review	Jun 23, 2006	James Thompson	C-GABC the C172 ab initio trainer may get blown off the taxiway Alpha by the Dash 7 that does maintenance run-ups all night on the ramp.	Advise students of the hazard. Request the DOM to move the Dash 7 to a different area for full power runs.
test one	3	Complete	Sep 17, 2007	Craig Borkowski	this is a test	this is a test
Gate	3	Review	Apr 25, 2007	Jack Pilot	Flight crew cannot exit groundside after hours.	Provice a combi lock
Test	1	Review	Sep 15, 2007	James Thompson	This is a test e-mail of the SMS Hazard Report. Something unusual happened and it should be documented.	I think we should round up the wagons and fix the problem.
This is a Test	1	Review	Jun 25, 2007	James Thompson	This is a test to see how this works.	This is a test to see how this works.
aaa	1	Review	Jun 25, 2007	James Thompson	aa	a
FOD	-	Initial	Sep 23, 2007	Jack Pilot	During aircraft loading several large peices of FOD were discovered underneath the left prop.	Ground and Flight crew should conduct a FOD inspection prior to engine start. This policy should be added to the the Aircraft SOP's.
Hazard Report	-	Initial	Sep 17, 2007	Jack Pilot	This is a hazard report submitted by a company employee.	It only happened once, it will never happend again.

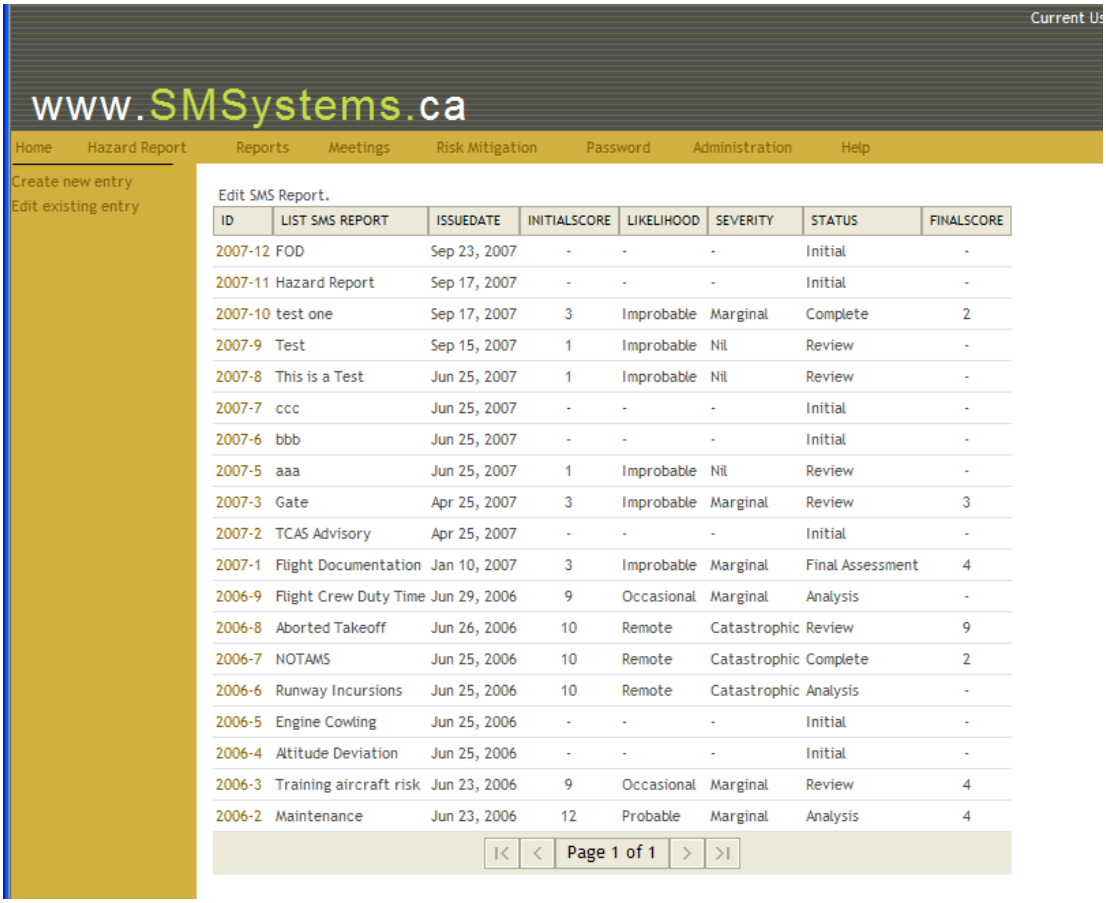
Hazard Report Status

Users can view submitted Hazard Reports and its current status. **SMSystems.ca** uses the following status codes for Hazard Reports.

1. **Initial** → A Hazard Report has been entered into the system.
2. **Analysis** → The Hazard Report is currently under analysis.
3. **Complete** → The Committee has reviewed the hazard and risk mitigation.
4. **Review** → If the hazard needs to be reviewed a review date will be provided.
5. **Final Assessment** → The hazard and risk mitigation has been reviewed by the Director.

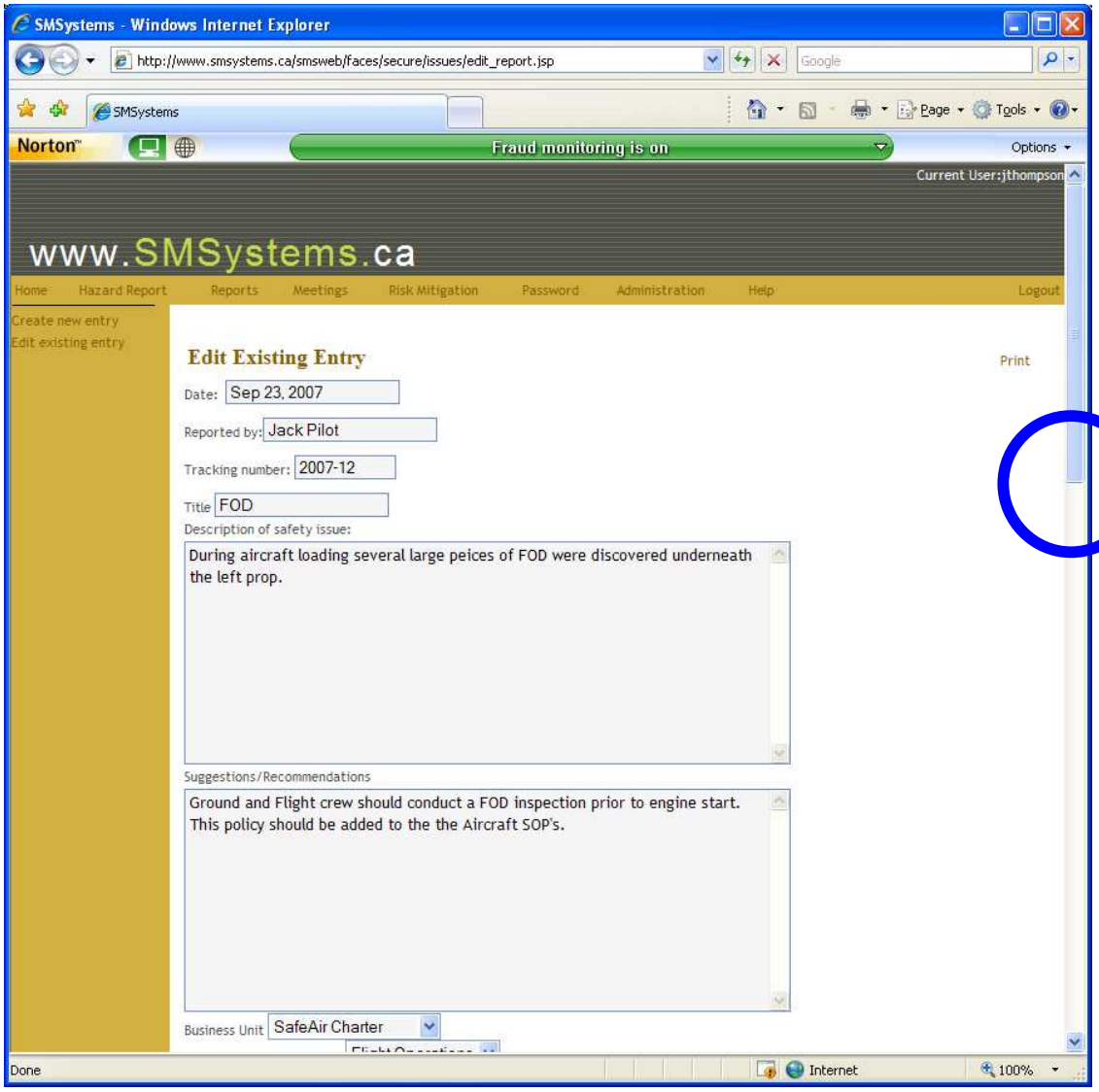
Committee Review

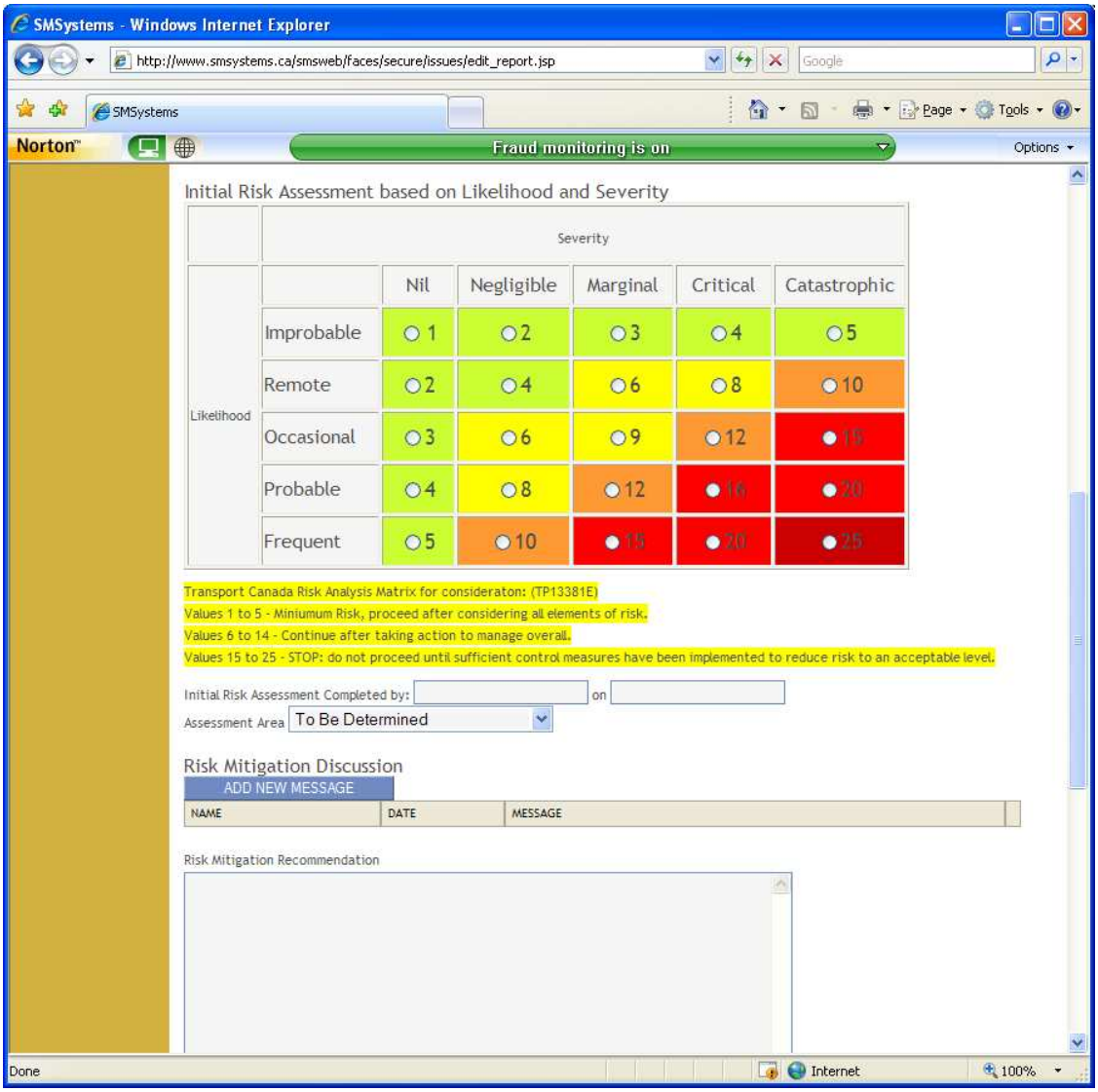
Once the Hazard Report has been submitted committee members including the designated management and supervisors will be notified by e-mail that a Hazard Report has been submitted. Committee, Director, and Administration users can access the Hazard Reports for review.



1. Login into website.
2. **Select Hazard Report → Edit existing entry**. (from the list select the report you wish to edit by clicking the **ID number** in the left column.)

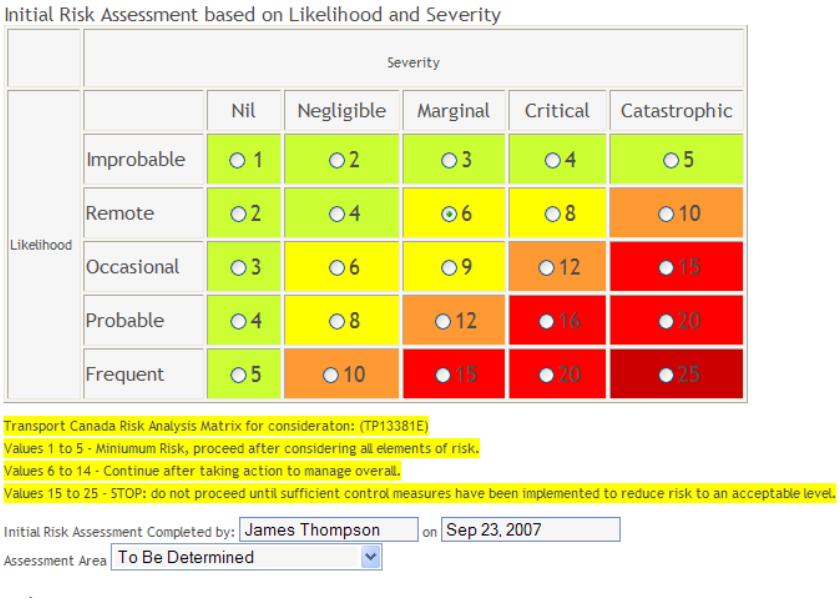
The selected hazard report will open under the heading **Edit Existing Entry**. Use the browser scroll bar to view the entire report. **Note** that the hazard report will not be updated until SUBMIT has been clicked.





Initial Risk Assessment based on Likelihood and Severity

SMSystems.ca uses the Risk Analysis Matrix as recommended in Transport Canada publication (TP13381E) for the initial and final risk analysis. As recommended by this document Risk Analysis values of **1 to 5 (green)** suggest a minimum risk, a value of **6 to 14 (yellow & orange)** suggest the company continue after taking action to manage overall, and values **15 to 25 (red)** suggest that the company **STOP** the practice, and do not proceed until sufficient control measures have been implemented to reduce risk to an acceptable level.



Once an initial risk analysis has been given to the hazard report the "Initial Risk Assessment Completed by:" and Date will be automatically filled. The Assessment Area is used to identify areas which you wish to track related hazard reports. The Assessment Area choices are determined by the Certificate holder. The Companies SMSystems administrator can modify this field to reflect the areas that each individual company is interested in tracking. Examples would be ATC communications, Fatigue Management, etc. The Initial Assessment can be completed by committee members who have access to the hazard report.

After the Initial Risk Assessment the SMSystems.ca has created a **Risk Mitigation Discussion** forum which can be used by committee members to comment discussion points relevant during the risk analysis. Any message added to the Risk Mitigation Discussion generates an e-mail sent to all committee members who have access to this business unit. Once mitigation has been determined it is then entered in to the Risk Mitigation Recommendation box.

If the **Final Risk Assessment** is completed between SMS meetings by a supervisor or manager (Chief Pilot, Director of Maintenance, Director of Flight Operations) the date and committee member who completed the Final Risk Assessment and date will be entered. Depending on the companies SMS culture the Risk Mitigation, Deferral, Committee Review, and Director Review will be identified as the hazard report is reviewed.