

FSIS Version 3.0

User Manual

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Introduction

Overview

1. The purpose of this document is to describe how the Flight Safety Information System (FSIS) is used to submit a Flight Safety Incident or Accident report as well as a Hazard report, and monitor, search, and distribute reports from the database.
2. This document does not explain the submission of reports from a business point of view; that knowledge is a prerequisite to using this application. The focus of this document is on the interface of the application itself and is intended to help the user “get started”.
3. Additional help about a specific topic or function can be found through the Main menu – Help - Help topics or by contacting DFS at 992-0179 or 995-7037.

New users

4. Access to the FSIS database is controlled by Account User ID and Password. Complete a “New/change FSIS Account” form, available at <http://airforce.dwan.dnd.ca/dfs/> (FSIS/Account request) and fax the signed form to DFS, Attn: Gail Bull at Avn 842-5187 or 613-992-5187. You will be notified when the account has been created, and provided a username and password to access the application.
5. At first login, new users will be prompted to change their password. The new password must be a minimum of 8 characters, and contain at least one digit and one uppercase character.
6. At any other time, the password can be changed through the **Main Menu/Tools** option.

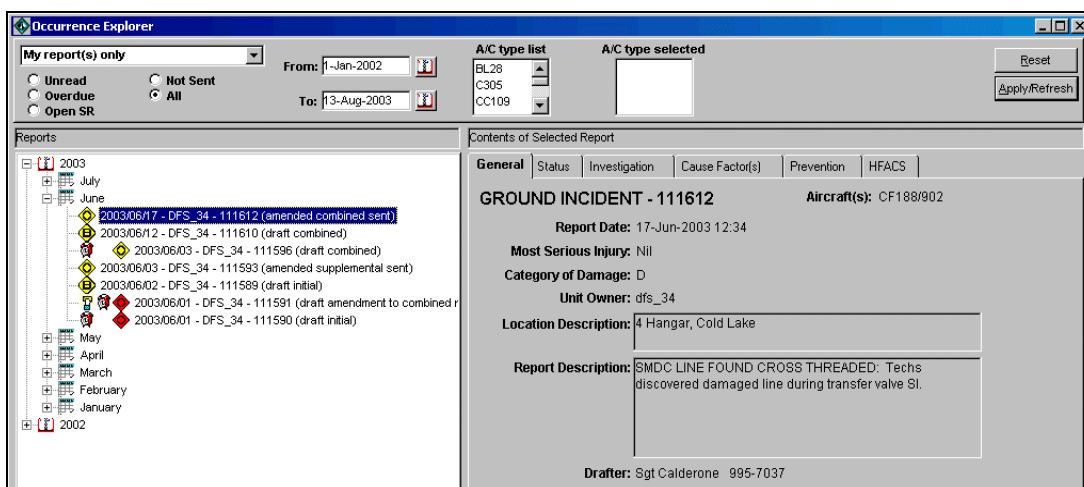
Explorer

Overview

7. After a successful login, FSIS opens the Occurrence Explorer window. The left panel is a tree-view of occurrence and hazard reports, organized by year and month. The right panel displays a summary of the left panel selected item.

Note
Accidents are entered from 1946; incidents from 1966.

8. To select a report, double-click on the **Year**, then on the **Month** (or click on the “+” beside each). Click on the report to display it in the right panel and to action.











9. The right panel tabs allow the user to review the report information within the Explorer screen. The message # and Date/Time Group indicating when the occurrence was released or “sent” can be found under the Status tab. The free text fields can be copied, but the data cannot be edited within this window.

10. The left panel tree-view rows display the following information:

- a. Date of occurrence
- b. User Identification
- c. Report ID number
- d. Status of the report: A *draft* status indicates that the report is still “a work in progress”; a *sent* status indicates official release of the report by the appropriate level.

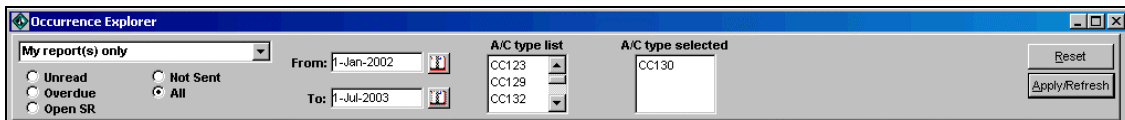
Icons

11. The following icons are used in the Explorer window:

- a.  Accident: represents an accident occurrence.
- b.  Occurrence: represents an incident occurrence.
- c.  Hazard: represents a hazard report.
- d.  Bird Strike: represents an occurrence that contains bird strike data. A red background colour will be used if it is classified as an accident.
- e.  New/Unread: the “hand holding a letter” represents a new occurrence or hazard entry, a new release (send) of information for an existing report, or information added to the WFS, 1CAD, or DFS Comment fields through the Follow-up function. The New/Unread icon will display until the occurrence or hazard is opened, marked as “read”, or for six months after the report has been closed.
- f.  Overdue: The red clock provides a visual indication that the final report is overdue, appearing when the supplemental or combined report has not been completed within 30 days of the date of occurrence.
- g.  Request Amendment: The Out box icon identifies an occurrence report that has been reopened to the originator enabling amendments to be done.
- h.  Right Mouse Button icon: Indicates that functions are available by clicking on the right mouse button.

Filters

12. The following filter selections are available:



- a. From the dropdown list, you can select **All report(s)**, **My Wing’s report(s) only**, or **My report(s) only**.
- b. The radio button selections will filter the occurrences based on occurrence status. The application default is “**All**”.

- c. A time frame is specified with the “**From:**” and “**To:**” filter. The “**To:**” date defaults to the current date.
- d. Double-click to select or deselect aircraft type(s) or click and drag to move selections between the **A/C type list** and **A/C type selected** boxes. If there is no A/C type selected, all occurrences will be retrieved. The application retains the last A/C type filter selections used when closing FSIS.

13. The **Reset** button clears all filter selections, while the **Apply/Refresh** button starts the search and refreshes the tree-view. Each time a change has been affected, **Apply/Refresh** must be activated.

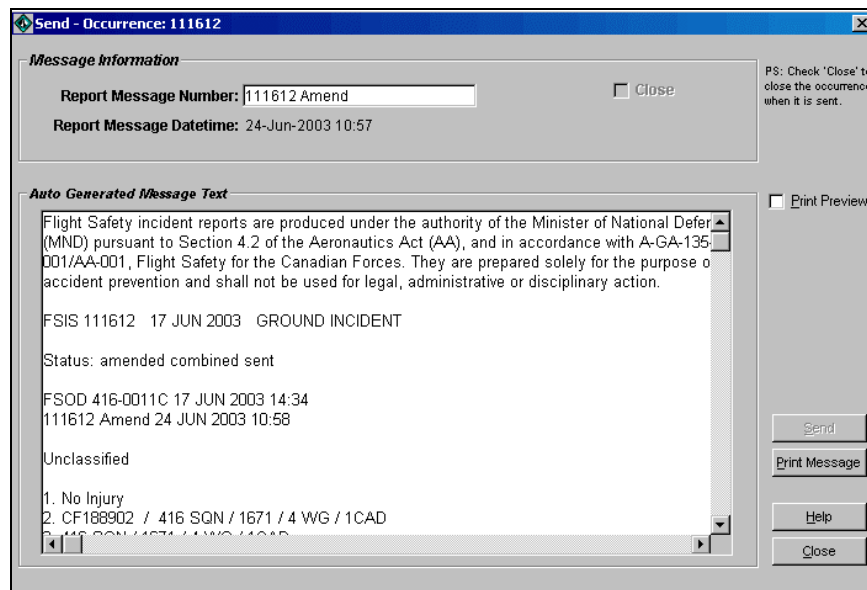
Action Options

14. Report action options are enabled or disabled based on the user’s access level, selected tree-view item (occurrence or hazard) and its status/state. Highlight the report on the left panel and select the action required through **Main menu/Action** or click on the right mouse button.

- a. **Open/Edit** – Opens the selected item for review and/or edit.
- b. **Mark as Read/Unread** – Allows the user to remove or add the New/Unread icon from the selected report.
- c. **Request Amendment** – DFS, 1CAD FS, and WFSO function only. It unlocks Supplemental or Combined Sent occurrences, allowing the originator to edit the report. Activating this function sets the report to a “*draft*” status.
- d. **Close/Reopen Report** – DFS, 1CAD FS, and WFSO function only.
- e. **Cancel/Reactivate Report** – DFS, 1CAD FS, and WFSO function only. The reason why the occurrence is cancelled should be stated in the Comment field (on Preventive Measures tab) prior to cancelling the report.
- f. **Follow up** – When occurrence status is Supplemental or Combined Sent, specific Preventive Measures fields can still be updated using this function. A **Completed date** can be entered as well as comments in the **WFS Comments**, **1 CAD Comments**, and **DFS Comments** fields. When information is added through the Follow Up function, a *New/Unread* icon is generated by the application. The Follow up function is **not** available for hazard reports.

Open/Edit	
Send Notification	F4
Mark as Read/Unread	
Request Amendment	
Close/Reopen Report	
Cancel/Reactivate Report	
Follow up	
Add to Hot List	
View Report	
Refresh	F5

- g. **View Report** – Allows the user to generate the occurrence report to print or save as an electronic file. This function is **not** available for hazards reports.
- h. **Send** – Used when all the information has been entered and the occurrence/hazard report is ready to be released. This function is available to any user providing they have “send” privileges. Only draft status reports can be sent.
 - (1) When activated, the Send window opens and the **Report Message Number** is entered. The **Report Message Datetime** is system generated.

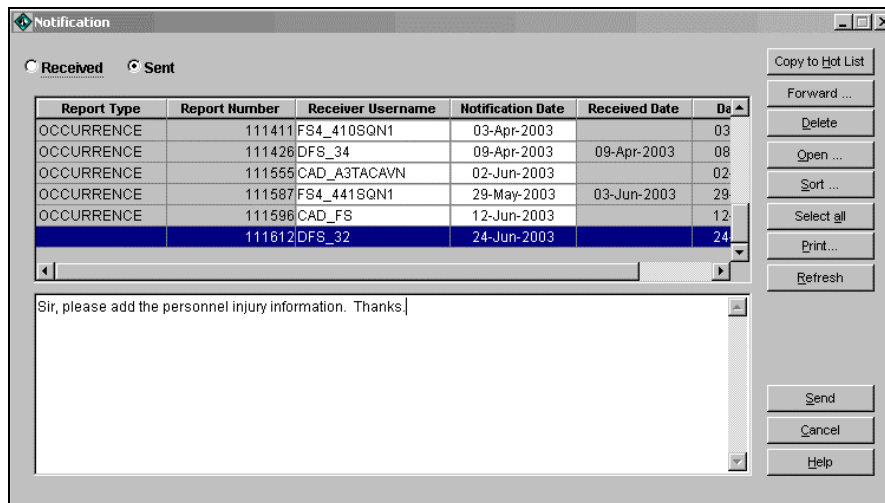


- (2) When sent, the report status changes and the occurrence/hazard goes through a validation to ensure all mandatory information is entered. The message text for an occurrence is displayed in the **Auto Generated Message Text** box. The message cannot be edited, however, it can be printed. A **New/Unread** icon is generated for the report on the Explorer window. The **Close** button returns the user to their previous window.

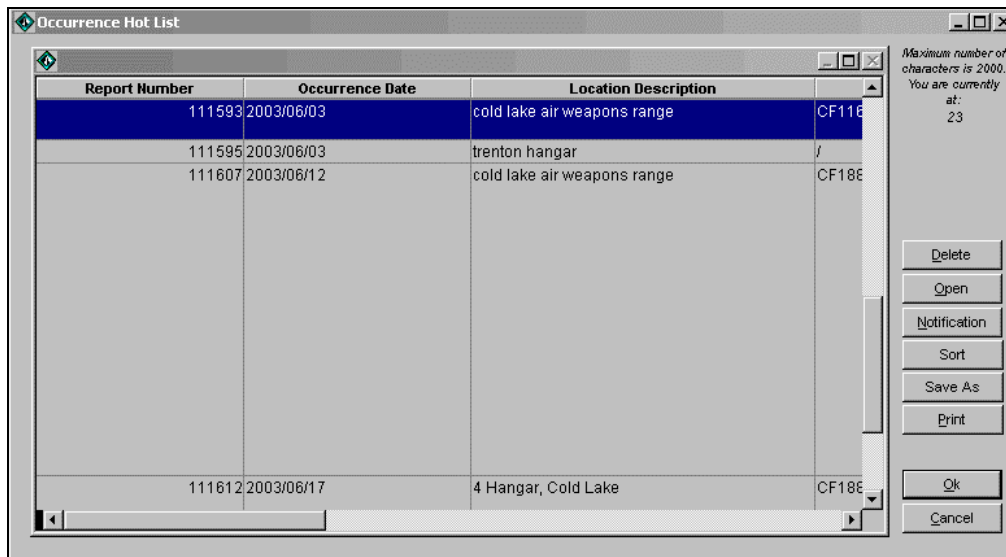
NOTE

Hazard report text will not be generated in the Auto Generated Message Text box during the **send** function. The **Send button** will become disabled (grayed out) indicating the send process is complete.

- i. **Notification** - This function allows the user to identify occurrence and hazard concerns to other FSIS users. (It can be considered an internal e-mail system). It could also be used as a **Bring Forward** function.



- (1) Select the user to be notified from the dropdown list under **Receiver Username**. Enter the **Notification Date** (when you want the recipient to receive the notification) as well as a comment in the Comment box. To send the same notification to more than one user or reply to a notification, select the **Forward** option.
 - (2) When the notification date is reached, the recipient will be advised that they have received a notification. The **Received Date** shows when the destination addressee opened the message. The **Date Stamp** indicates when the message was sent.
 - (3) The occurrence/hazard referenced can be opened by the recipient from within the notification window, saved to their personal hot list and/or forwarded to other FSIS users. A **Sort** option is also available.
 - (4) A user can access their notifications through **Main Menu/Tools/Notification**. The **Received** and **Sent radio buttons** toggle between the two items.
- j. **Add to Hot List** – This function allows the user to build a personal list of occurrences/hazards, making it ideal for tracking specific issues (i.e. occurrences dealing with ALSE discrepancies). A Comment Field is provided for each report added to their Hot List.
- (1) Add selected reports to a personal Hot List through the Right Click Action option or **Main Menu/Action** selection. **Access** the Hot List through **Main Menu/Tools/Hot List**. A brief description of the reports, as well as the user’s comments, is displayed. Options available include the capability to open the occurrence/hazard, send a notification, or print the list.



Print and Save Capabilities

15. Any occurrence or hazard report can be printed from their respective Search Results window, the Explorer window, or their Input window. However, only the Occurrence report can be saved to an electronic file. This is done within the Explorer window through the Action option **View Report**.

16. To see an example of the occurrence and hazard reports, go to FSIS Reports.

Main Menu – Administrative Tools

17. Under **Main Menu/Tools**, the user will find the following administrative tools:

- a. **Change Password**, and
- b. **Language Preference** (dropdown selections will be in the language chosen, however, the free text fields will display the information in the language entered).

18. In addition, under **Help**, the user has a direct link to the DFS Intranet Home Page.

Occurrence Input


Overview


19. To input a **New** occurrence, the occurrence window is accessed through **Main Menu/File/New** or by clicking on the occurrence icon on the menu bar. An ID number is generated for every occurrence entered. The number, along with the occurrence aircraft, is displayed on the title bar. Once saved, the report cannot be deleted – only *Cancelled*. The application updates the occurrence status based on the information/fields entered.



20. In addition to free text format, the following input fields are used to enter the information:

a. Dropdown box: Only one selection is permitted. It can be changed or deleted, as required.

b. Blue Access icon:  This icon could appear in conjunction with a dropdown list as shown, or by itself, as on the Cause Factor screen. Click the icon, then use the “ADD” or “DELETE” button on the new window to enter/edit the data.

c. Right Mouse Button icon:  Indicates information can be added/deleted to the applicable fields by clicking on the right mouse button (used in the Personnel and aircraft component screens).

d. Calendar icon: Enter the date using the format dd-mm-yyyy, or click on the icon to open calendar.

21. There are mandatory fields that must be entered for each occurrence report (See page 22). However, any information that is pertinent to the investigation should be entered, regardless of the mandatory requirements.

General Tab

22. Information on this tab includes:

- a. Report Date: Date/Time (Zulu) of occurrence
- b. Location Type: Air or Ground selection.
- c. Armament Implication: Check box if applicable

The screenshot displays the 'Occurrence Report - 111612 - CF188902' window. It features a tabbed interface with 'General' selected. Key fields include: Case Number (111612), Report Date (17-Jun-2003 12:34), State (Open), Status (amended combined sent), Occurrence Counted (checked), Category of Occurrence (Severity: INCIDENT, Air/Ground: GROUND, Birdstrike: unchecked, Armament Implication: unchecked), Category of Damage (D), and Most Serious Injury (Nil).

d. Application Determined fields:

- (1) Occurrence Severity: Accident or Incident classification based on Aircraft Category of Damage and Most Serious Injury Category
- (2) Birdstrike: Indicated only if entry is made in Bird Strike Tab
- (3) Category of Damage: Indicates the highest level of aircraft damage for occurrence based on entry in the Aircraft tab.
- (4) Most Serious Injury: Indicates the highest injury category for the occurrence based on entry in the Personnel tab.
- (5) Occurrence Counted: Indicates if the occurrence is “counted” for statistical analysis. The following perimeters would generate a “Not Counted” indication:
 - Bird strike with E category damage
 - Cadet (BL28, SZ22, SZ23) or NonCF aircraft type entered
 - Cancelled occurrences
- (6) Status: determined by application based on information/fields entered. (See FSIS Occurrence Status flowchart on page 40)

Aircraft tab

23. To add or remove an aircraft, use the **Main menu/Aircraft** menu. All occurrences must have an aircraft assigned; **Nil000** can be used if required. More than one aircraft can be added to an occurrence. Aircraft will be displayed on a registration tab on the right side of the aircraft window, as well as on the occurrence title bar.

Note
An aircraft must be added in order to save the occurrence at the initial entry.

24. There are three sub-tabs found under the Aircraft tab:

- a. Aircraft: Information entered includes:

- (1) Category of damage,
- (2) Operated by (Unit),
- (3) Unit of Ownership - application determines the Wing/Base of Ownership by Unit of Ownership entry,
- (4) Stage of Operations,
- (5) Type of Flight - required for air occurrences only,
- (6) Fire/Explosion,
- (7) Emergency Exit – used whenever an emergency air or ground egress is carried out,
- (8) Flight Attribute(s), and
- (9) Aircraft Maintenance.

b. Component(s):

Component/ Nomenclature	WUC	Component Serial Number
EMERGENCY EQUIPMENT	KDCG	A3361
EMERGENCY EQUIPMENT	KDCE	2054
WEAPONS SYSTEMS		

- (1) Information is added/deleted with the right mouse button function. Information is mandatory in the Component section in order to add rows for the **Part Number** and **CFTO Reference** sections. As the Part # and CFTO References are associated with a specific component, you should save the information before proceeding with another component entry.

- (2) The TSN, TSO, and TSI numerical entries use Airframe hours as the unit of measurement.
- (3) If Weapons Systems is selected, Munition Lot Number and Batch Number become available.

c. Arresting System


- (1) The Successful/unsuccessful Engagement radio buttons are minimum requirements for the tab if information is entered. All known information should be completed if the aircraft engages the arresting system.

Location tab

25. The **Location of Occurrence** free text field is used for the majority of occurrences. **Latitude** and **Longitude** fields could be used for accidents. **NAVAID** information is used for birdstrike occurrences.

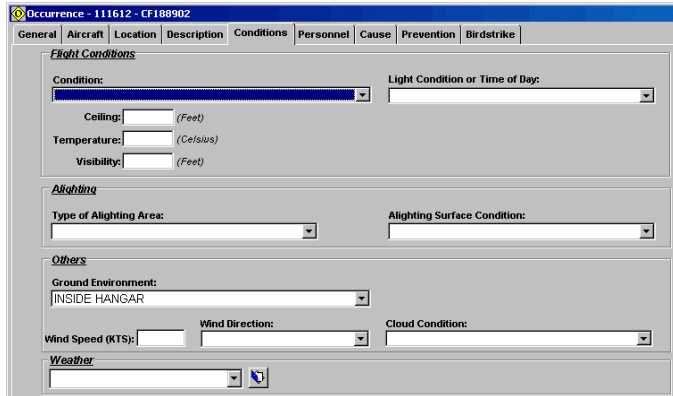
Description Tab

26. Information found under this tab includes:

- a. Type of Occurrence – 1: Indicates how or what happened in the occurrence (i.e. Aborted Take-off; Undercarriage malfunction; Near miss). This field is used extensively as search criteria field. The listing may be found on the DFS Intranet Website at http://airforce.dwan.dnd.ca/dfs/PDF/FSIS/typeocc1_e.pdf.
- b. Type of Occurrence –2: Identifies the specific aircraft systems/components which failed or were damaged during the occurrence. This field is also used extensively as search criteria. The listing may be found on the DFS Intranet Website at http://airforce.dwan.dnd.ca/dfs/PDF/FSIS/typeocc2_e.pdf.
- c. Description of Occurrence: Always begin the text with a brief two or three word title description of the occurrence followed by a colon. The title shall be in upper case (e.g. MID AIR COLLISION:) with the remainder of the description in normal script.
- d. Reporting Planned: The **SR Included** and **SR Separate** boxes dictate the report status generated by the application. It defaults to SR Separate, used for Initial and Supplemental reports. If releasing a Combined report, chose the **SR Included** box. The Armament Implication box is automatically indicated if the selection was made on the General tab. The Birdstrike indication occurs if an entry is made on the Bird Strike tab.
- e. Drafter’s Name and Telephone
- f. The **Related Hazards** field allows the user to link identified hazards to an occurrence. Use the **Blue Access Icon** to open up the list of hazards entered in the database and select the one to be linked. The selected hazard can also be opened with the **Yellow Folder Icon**. 

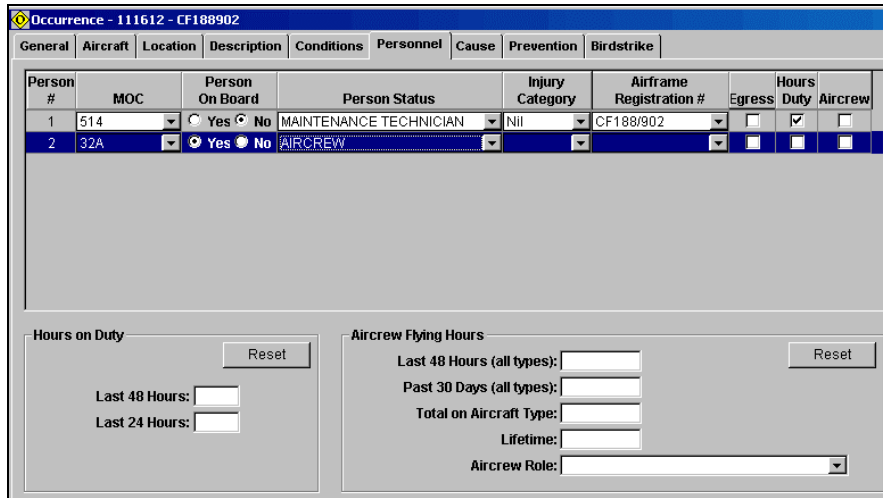
Conditions Tab

27. The screen is split into four main areas: Flight Conditions, Alighting, Others (dealing with Ground Occurrences) and Weather. The **Ground Environment** field is mandatory when the occurrence is classified as a Ground Accident or Ground Incident.



Personnel Tab

28. Use the Right Mouse button function to add/delete data. Enter/save the aircraft information before completing this window, to ensure the personnel entries can be linked to the aircraft.



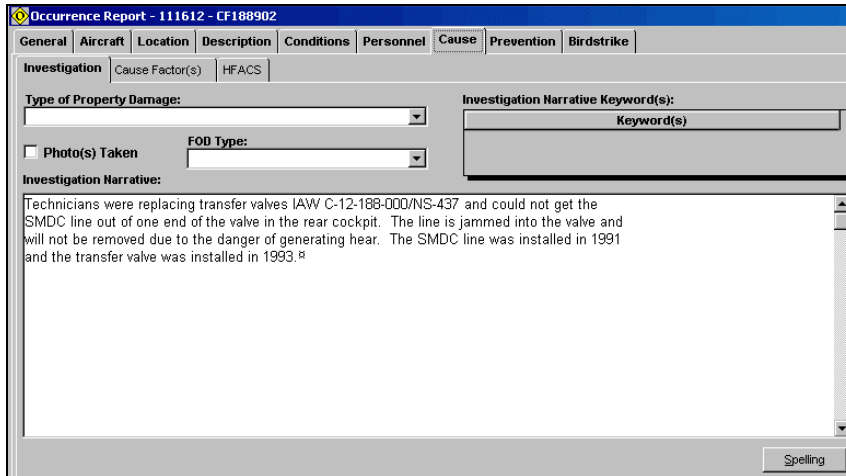
29. All personnel injuries must be entered; mandatory fields for injury related occurrences are Person on Board, Person Status, and Injury Category.

30. The application generates the “Hr on Duty” and “Aircrew” checks to give a visual indication if information has been entered.

Cause Tab

31. There are three sub-tabs under the Cause tab.

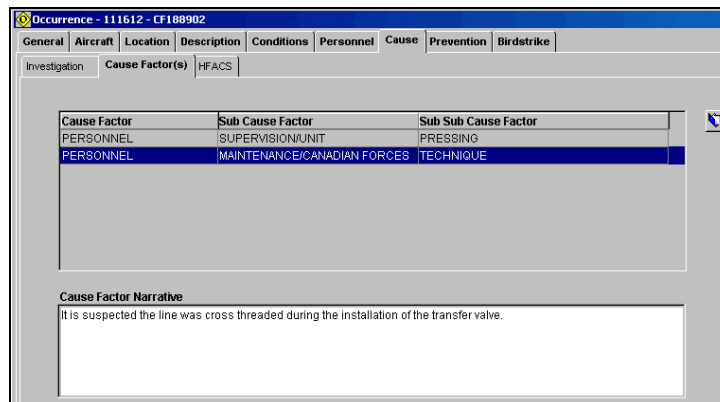
- a. Investigation:



- (1) The **Investigation Narrative** field is a free text field. Due to database technicalities, font formatting (bold, underline, italic, and colour) cannot be saved in this field.
- (2) The **Keyword(s)** field is accessed with the Right Mouse button option. It is used exclusively as a search function, though not all occurrences will be linked to a keyword.
- (3) Complete the **Type of Property Damage** and **FOD Type** fields as necessary. The FOD type field indicates the FOD origin. For example, if a tool is left in the aircraft, it would be classified as a “Personnel” not “Material” FOD type.
- (4) Check the **Photo(s) Taken** field if applicable, and state in the Investigation Narrative field where the images are being held.

b. Cause Factor(s):

- (1) Use the Blue Access Icon to open the cause factor input window. The Cause Factor Narrative can be added through the input window or directly in the Cause Factor Narrative fields, once a cause factor has been entered in the Input window.



- (2) All entered cause factors are shown, as well as the comment for the selected cause factor.

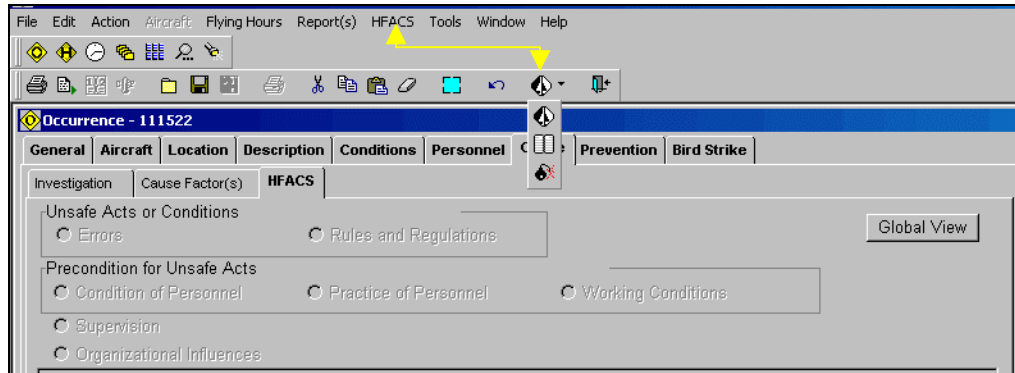
c. HFACS


- (1) The CF HFACS model provides a framework for identifying, classifying, and organizing active and latent failures within the “Personnel” area of the cause factor system. There are four levels in the model: Unsafe Acts or Conditions, Precondition for Unsafe Acts, Supervision, and Organizational Influences.

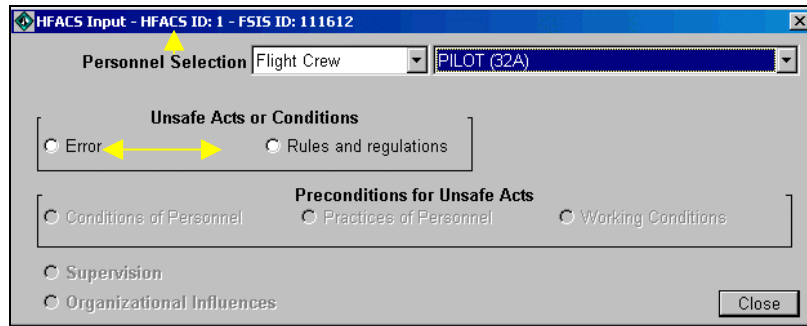
Note

It is strongly recommended that you have a copy of the HFACS Model (A-GA-135-001/AA-001 Chap 11 Annex A) available when entering HFACS data.

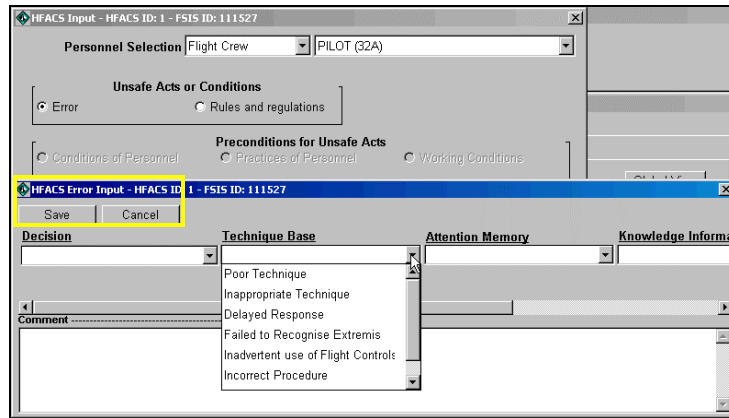
- (2) Enter, Modify, or Delete a HFACS item with the Icon dropdown or **Main Menu/HFACS** selection.



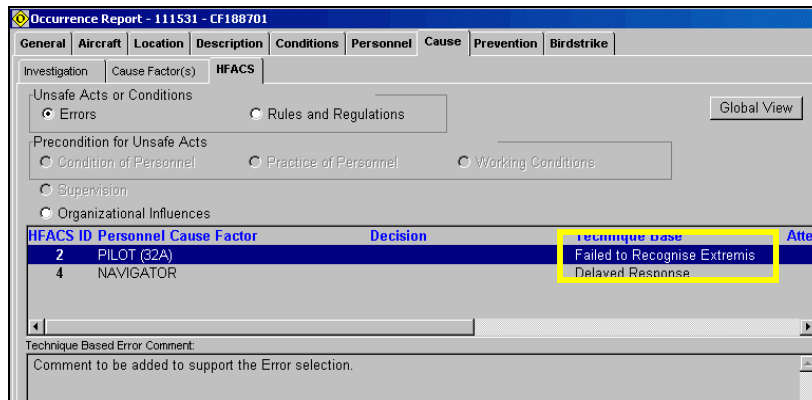
- (3) A new HFACS entry  always starts with a two-level Personnel Selection. Each Personnel selection is identified with a HFACS ID number. Selection of either “Management” or “Supervision” restricts access to the Supervision and Organizational Influences level only.



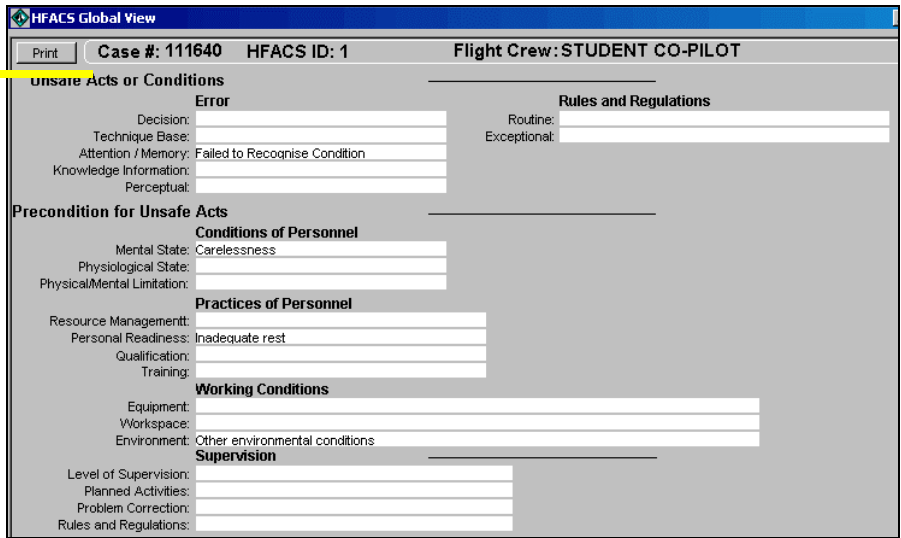
- (4) Once the Personnel Selection has been selected, identify what happened. Was it an Error or Rules and Regulations transgression? Only **one** selection is made for each HFACS ID in the “Unsafe Acts or Conditions” level.
- (5) The selection of either Error or Rules and Regulations opens up the appropriate Input window. Again, only **one** selection is made for each HFACS ID at this level and the selection should be amplified with a supporting comment. Use the **Save/Cancel** buttons to close the Input window. If you select more than one entry at this level, you must delete the extra selections in order to save the information.




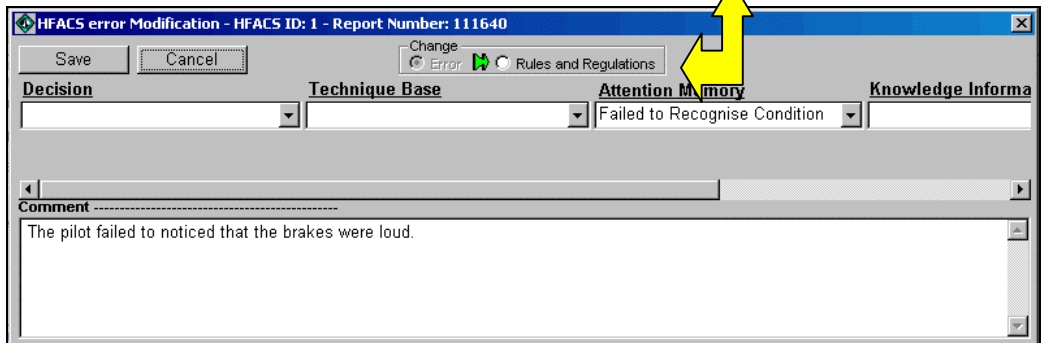
- (6) All four levels in the HFACS model work the same way. A selection in any level will open an input window to access the dropdown lists and add supporting comments. Multiple selections are allowed for each HFACS ID in every level except Unsafe Acts or Conditions. A description of the field is available by right clicking on the title (e.g. Decision). Within the HFACS input windows, a gray radio button indicates entries in the field.
- (7) On the main HFACS tab, a white radio button indicates entries in the field. Selecting the field will list the HFACS IDs associated with it. Hi-lighting a HFACS ID and clicking on the specific entry display the narrative text field.



- (8) The Global view compiles a summary of the entries for the individual HFACS ID. It has a print capability, but cannot be saved in an electronic format.



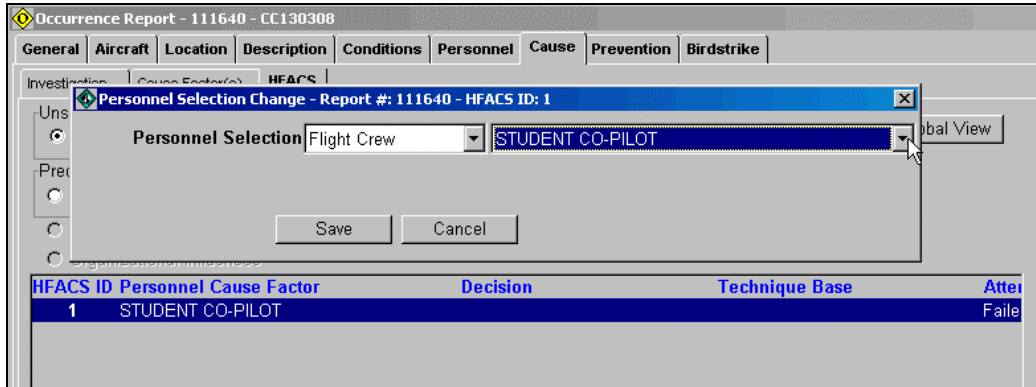
- (9)  The Modify icon opens a Modification window at the selected HFACS level to allow changes to the dropdown selections or narrative comments. The modification window is also accessed through the **Main Menu/HFACS** selection or by double clicking on the specific HFACS ID.
- (10) Within the modification window at the Unsafe Acts or Conditions level, the user can toggle the entry between an Error and Rules and Regulations selection.




Note

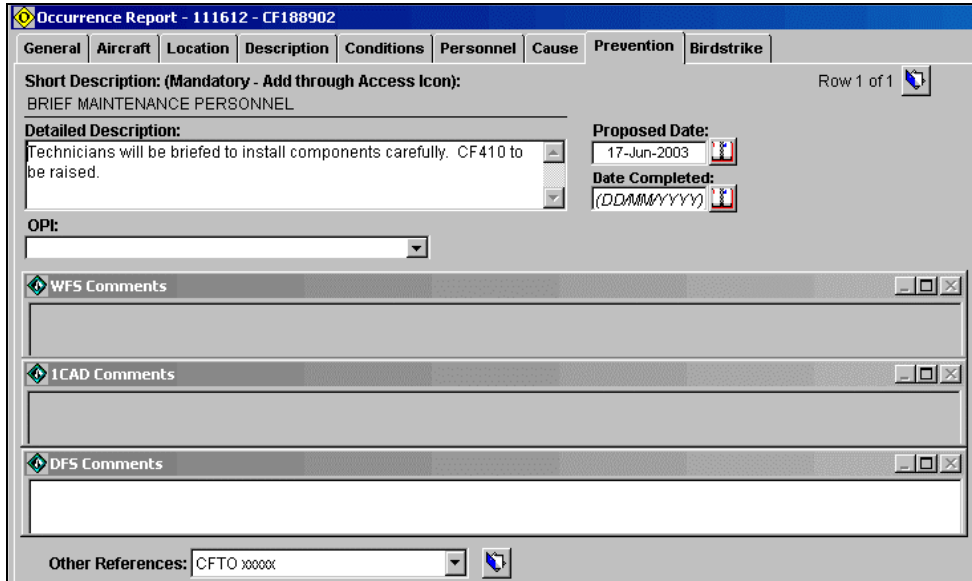
You can only modify levels that already have entries associated to an HFACS ID. You cannot add additional levels of information through the modify function. **It is recommended that an initial value be entered in all four levels, and then modify/delete the HFACS information accordingly.**

- (11) If the Personnel selection entry must be changed, right click on the applicable HFACS ID to open the Personnel Selection Change window.



- (12)  The delete icon will remove all HFACS information for the selected HFACS ID if used in the Unsafe Acts or Conditions Level. If any other level is selected, it will only delete the information entered for that level. If an HFACS ID is deleted, the application does not re-number the remaining HFACS IDs.

Prevention Tab



32. A preventive measure is required for each occurrence. The Preventive Measures input window is accessed with the **Blue Access Icon**. The **Short Description** selection must be made within the input window. The supporting narrative can be added through the input window or directly in the **Detailed Description** field under the Prevention tab. Each Short Description selection can only be used **once**.

33. The Row Count indicates the number of preventive measures entered. An **OPI** should be designated for each preventive measure. The **Proposed Date** is mandatory at initial entry of every preventive measure. The **Date Completed** field is mandatory to close the occurrence.

34. The **Other References** field, accessible through the **Blue Access Icon**, allows the user to enter the references dealing with the occurrence.

35. The **Comment** fields are accessible to 1CAD and DFS only if the occurrence status is “sent”. The WFSO will have access to their field for all occurrences belonging to their Wing, regardless of the status.

Bird Strike Tab

36. Bird strike data should be entered for bird strikes, near misses, or when birds are seen at extraordinary altitudes, unusual circumstances or in large flocks. The report, submitted to Transport Canada, supplies information on bird habits, necessary for devising bird strike avoidance measures.

37. The Bird Strike tab is broken down into two sub-tabs: **Bird Strike** and **Details**. Both sub-tabs are straightforward and all known information should be filled out. Information must be entered in these fields for the application to categorize the occurrence as a bird strike.

Mandatory Occurrence Requirements

38. The following is considered mandatory information and should be completed prior to the sending of the occurrence:

- a. Initial Report:
 - (1) Date of occurrence/zulu time
 - (2) Location type (air or ground)
 - (3) Aircraft
 - (4) Category of damage
 - (5) Unit of ownership
 - (6) Stage of operations
 - (7) Type of flight (air occurrence only)
 - (8) Location of occurrence
 - (9) Type of occurrence – 1
 - (10) Description of occurrence
 - (11) Drafter’s name and Phone #
 - (12) If injury involved, the Person on Board, Person Status, and Injury Category fields on Personnel tab
- b. Supplementary
 - (1) Investigative narrative

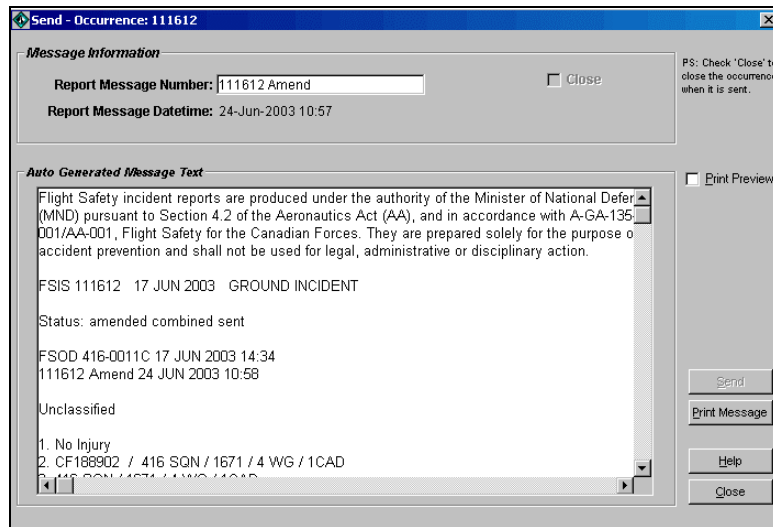
- (2) HFACS and/or Cause factors/supporting cause factor narrative
- (3) Preventive measures/supporting PM narrative
- (4) If ground occurrence, the Ground Environment field on the Conditions tab

Sending an Occurrence

39. Once all the information has been entered, the occurrence is ready to be released or “sent”. This function is available to any user providing they have “send” privileges. Only “Draft” status reports can be sent.

40. Access the **Send** function via **Main menu/Action** if within the occurrence input window, or if on the Explorer screen, through the Right Mouse Click option.

- a. When actioned, the Send window opens and the **Report Message Number** is entered. The **Report Message Datetime** is system generated.



- b. When sent, the report status changes and the occurrence goes through a validation to ensure all mandatory information is entered. The message text is displayed in the **Auto Generated Message Text** box. The message cannot be edited, however, it can be printed. Lastly, a **New/Unread** icon is generated for the report on the Explorer window. The **Close** button returns the user to their previous window.

Note


Once an occurrence is sent, the message number entered for the send process cannot be changed.

Print/Save occurrence report

41. An occurrence report can be printed from the Search Results window, the Explorer window, and any Occurrence input window. The Occurrence report can only be saved to an electronic file within the Explorer window through the Action option **View Report**.

Occurrence Search

Overview

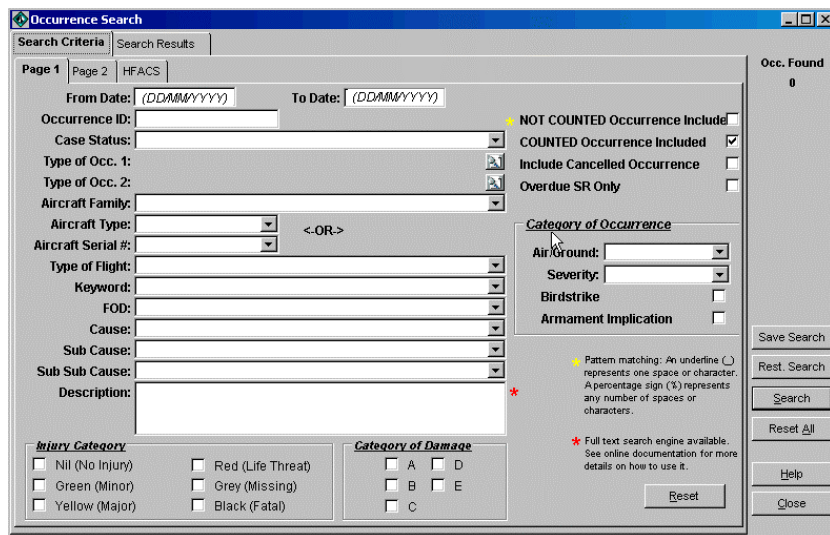
42. The occurrence search function can be accessed with the Search Icon  on the main tool bar or through **Main Menu/Tools**.

43. The occurrence search screen is divided into two tabs: **Search Criteria** and **Search Results**. The Search Criteria tab is further broken down into three additional tabs: **Page 1**, **Page 2**, and **HFACS**. All criteria screens contain filters to customize the search parameters and reduce the search time.

44. By default, all searches are conducted on the **COUNTED** occurrences only. You can change the search criteria to **NOT COUNTED** cases (e.g. Non CF A/C, Gliders) as well as **Cancelled** or **Overdue** occurrences.

Criteria Fields


45. The occurrence search retrieves occurrences that match the data entered in the criteria fields. It is not necessary to input data into every field, and criteria may be selected from all three pages for a single search if necessary. As some of the dropdown lists are quite long, they are designed so the listing will adjust itself to display a match based on a partially typed item. Once the desired search criteria have been entered, press the **Search** button to activate the search.




The screenshot shows the 'Occurrence Search' application window with the 'Search Criteria' tab selected. The window is divided into several sections:

- Page 1** (selected): Contains fields for 'From Date' and 'To Date' (both with 'DDMMYYYY' format), 'Occurrence ID', 'Case Status', 'Type of Occ. 1', 'Type of Occ. 2', 'Aircraft Family', 'Aircraft Type', 'Aircraft Serial #', 'Type of Flight', 'Keyword', 'FOD', 'Cause', 'Sub Cause', 'Sub Sub Cause', and 'Description'.
- Page 2** and **HFACS**: Not visible in the screenshot.
- Category of Occurrence**: Includes 'Air/Ground', 'Severity', 'Birdstrike', and 'Armament Implication'.
- Injury Category**: Includes checkboxes for Nil (No Injury), Green (Minor), Yellow (Major), Red (Life Threat), Grey (Missing), and Black (Fatal).
- Category of Damage**: Includes checkboxes for A, B, C, D, and E.
- Filters**: Includes checkboxes for 'NOT COUNTED Occurrence Include', 'COUNTED Occurrence Included', 'Include Cancelled Occurrence', and 'Overdue SR Only'.
- Buttons**: 'Save Search', 'Rest. Search', 'Search', 'Reset All', 'Help', 'Close', and 'Reset'.
- Occ. Found**: Shows '0'.
- Help Text**: 'Pattern matching: An underline () represents one space or character. A percentage sign (%) represents any number of spaces or characters. * Full text search engine available. See online documentation for more details on how to use it.'

46. On **Page1**, the following criteria fields are available:
- From Date/To Date**: If no dates are entered, the search will cover the entire database (1946 to present).
 - Occurrence ID**: Self-explanatory.

- c. **Case Status:** Example of status - Draft Initial.
 - d. **Type of Occ. 1:** Search criteria for how or what happened in the occurrence (ie. Aborted Take-off; Undercarriage malfunction; Near miss). The icon  opens the Type of occurrence selection window. A selection may be made at the category level or from the grouping within the category. The selection may be changed, but the **Reset** button must be used to delete the criteria field once the search is complete. The entire list of selections available may be found at the DFS Intranet Website at http://airforce.dwan.dnd.ca/dfs/PDF/FSIS/typeocc1_e.pdf.
 - e. **Type of Occ. 2:** Search criteria for specific aircraft systems/components that failed or were damaged during the occurrence. Functionality works like the Type of Occ. 1 field. The entire list of selections available may be found at the DFS Intranet Website at http://airforce.dwan.dnd.ca/dfs/PDF/FSIS/typeocc2_e.pdf.
 - f. **Aircraft Family/Aircraft Type/Aircraft Registration #:** Self-explanatory. Only one field can be used per search.
 - g. **Type of Flight:** Self-explanatory.
 - h. **Keyword:** A categorized listing of specific occurrence types (ie. Birdstrike, Engine Compressor Stall). Note that not all occurrences have a keyword assigned.
 - i. **FOD:** A dropdown listing indicating the FOD type.
 - j. **Cause/Sub Cause/Sub Sub Cause:** Self-explanatory. In Ver 3, the main cause factor of “Personnel” has been replaced by HFACS. Searching by “Personnel” as the cause factor will not retrieve occurrences with “Personnel” entries in HFACS; those occurrences can be retrieved using the HFACS search criteria tab.
 - k. **Description:** Free text search in the description field (See section Free Text Search for additional info)
47. Search filters are also available for **Injury Category, Category of Damage, and Category of Occurrence** criteria of **Air/Ground, Severity (Accident or Incident), Birdstrike, and Armament Implication.**
48. On **Page 2**, the following fields are available:

- a. **Investigation Narrative:** Free text search in the Investigation field. (See section Free Text Search for additional info).
- b. **Operated by/Unit of Ownership/Wing/Base of Ownership:** Self-explanatory.
- c. **Location Description:** Free text search in Location field. (See section Free Text Search for additional info).
- d. **Stage of Operation:** Self-explanatory.
- e. **Work Unit Code:** Field is case sensitive – use UPPER CASE only.
- f. **Related Hazard:** Occurrences linked to specific hazards can be identified through this field by entering the Hazard number. If number unknown, you can access the Hazard search screen through the icon. 

49. Under the **HFACS** tab, the following fields are available:

- a. **Has HFACS Data:** Retrieves all occurrences with HFACS info.
- b. **Personnel Selection:** Can search by main level (Flight Crew, Management, Supervision, Support Personnel, Other) or a sub-selection within the five groups (Pilot, ATC, Maintenance).
- c. **HFACS Model:** User has the capability to search for occurrences on each of the four levels of the HFACS model as well as the main categories within each level.

Note

User should only select one criteria field at a time. The search functionality for this page is programmed to retrieve occurrences that match all fields selected.

Free Text Search

50. There are three fields in the search criteria pages which allow a free text search: on Page 1 – Description field, and on Page 2 – Investigation Narrative and Location of Occurrence fields.

51. When performing a full text search, the underscore (_) represents one space or character while a percentage sign (%) is a wildcard symbol and represents any number of spaces or characters. Example of this use follows:

The screenshot shows the 'Occurrence Search' window with the following fields highlighted by red boxes:

- From Date:** 1-Jan-1999
- Aircraft Type:** CP140
- Description:** sono%

Annotations on the right side of the screenshot provide the following instructions:

- How many CP140 sonobuoy incidents occurred in 1999?
- Insert **From Date:** and **To Date:**
- Select **Aircraft Type**
- Specify **'sono%'** in **Description:** (free text search of the occurrence description field – para 8)
- The percentage sign (%) represents any number of characters and therefore should find all occurrences that include the term 'sono' (eg: sono, sonobuoy, sono's, etc).
- Alternate method:
- Remove **'sono%'** from **Description:**
- **Type of Occ.2** field: select **Weapons Systems/Underwater Detectors**

52. There are also *Logical Operators* which can be used: **and, or, and quotation marks (" ")**. See the following examples to clarify their use:

Occurrence Search

Search Criteria | Search Results

Page 1 | Page 2 | HFACS

From Date: 1-Jan-1999 To Date: 31-Dec-1999

Occurrence ID: _____

Case Status: _____

Type of Occ. 1: _____

Type of Occ. 2: _____

Aircraft Family: _____

Aircraft Type: _____ <-OR->

Aircraft Serial #: _____

Type of Flight: _____

Keyword: _____

FOD: _____

Cause: _____

Sub Cause: _____

Sub Sub Cause: _____

Description: wheel% and tire%

Injury Category

Nil (No Injury) Red (Life Threat)

Green (Minor) Grey (Missing)

Yellow (Major) Black (Fatal)

Category of Damage

A D

B E

C

* Full text search engine available. See online documentation for more details on how to use it.

Reset All Help Close

How many incidents occurred in 1999 with reference both to wheel and tire?

- Insert **From Date:** and **To Date:**
- Specify **'wheel'** and **'tire'** in **Description:** (free text search of the occurrence description field – para 8)

Operator: Using **'and'** between the words desired dictates that both words are present.

Occurrence Search

Search Criteria | Search Results

Page 1 | Page 2 | HFACS

From Date: 1-Jul-1999 To Date: 31-Dec-1999

Occurrence ID: _____

Case Status: _____

Type of Occ. 1: _____

Type of Occ. 2: _____

Aircraft Family: _____

Aircraft Type: _____ <-OR->

Aircraft Serial #: _____

Type of Flight: _____

Keyword: _____

FOD: _____

Cause: _____

Sub Cause: _____

Sub Sub Cause: _____

Description: flame or fire

Injury Category

Nil (No Injury) Red (Life Threat)

Green (Minor) Grey (Missing)

Yellow (Major) Black (Fatal)

Category of Damage

A D

B E

C

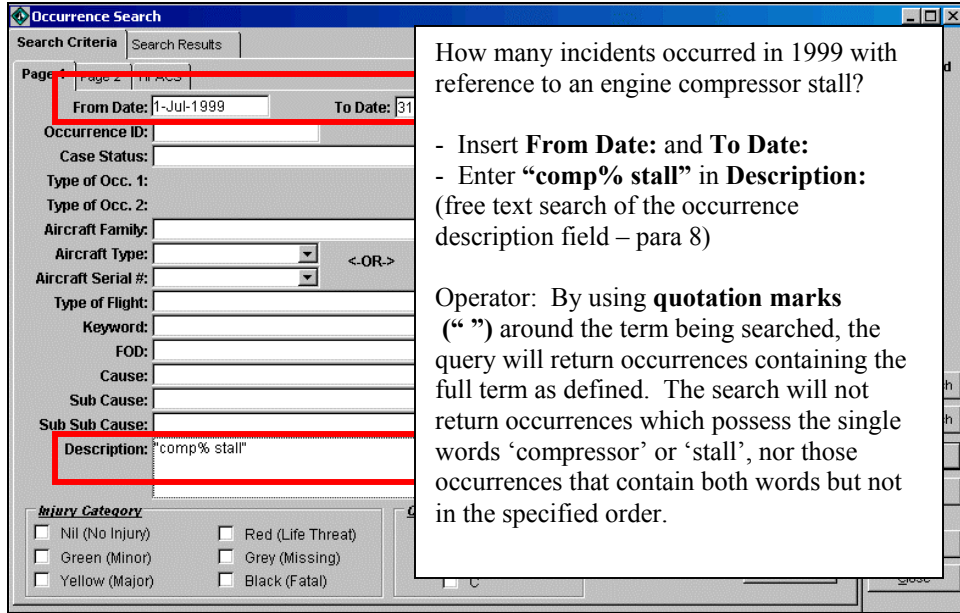
* Full text search engine available. See online documentation for more details on how to use it.

Reset All Help Close

How many incidents occurred in 1999 with reference either to flame or to fire?

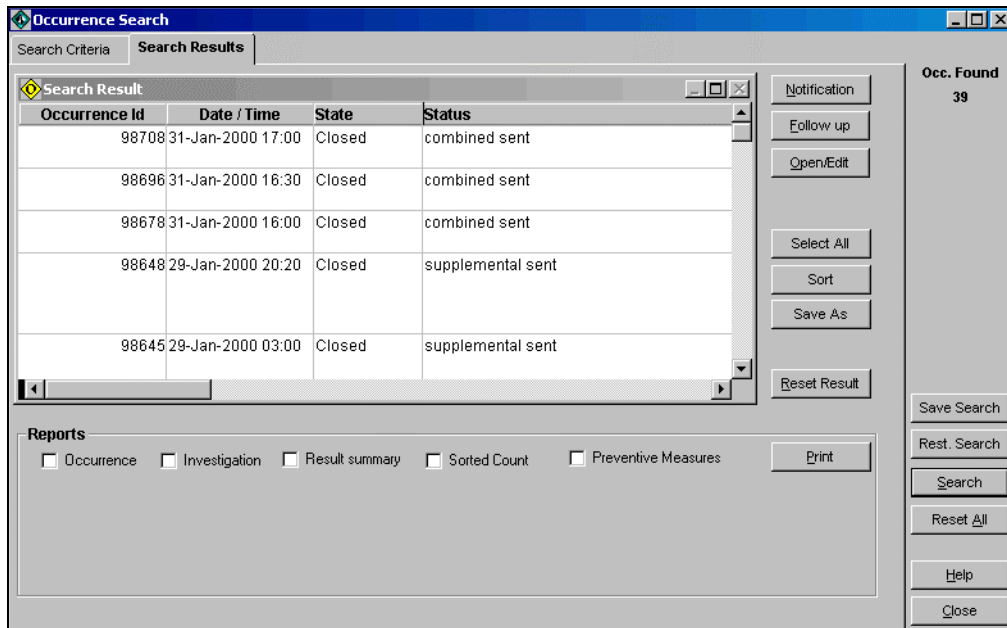
- Insert **From Date:** and **To Date:**
- Specify **'flame'** or **'fire'** in **Description:** (free text search of the occurrence description field – para 8)

Operator: Using **'or'** between the words desired indicates that only one of the words must be present.



Search Results

53. The **Search Results** tab opens when the search is complete. The **Occ. Found** displays the occurrence number count. Multiple searches can be performed and the results are cumulative. The **Reset** button will clear all search criteria selections but will keep the search results. The **Reset All** clears all the information in the search criteria and the search result windows.



54. If a search profile is to be repeated, you can save the search criteria through the **Save Search** button. The **Rest. Search** (Restore) button will bring up the saved search

profile. If using this function, you should review your selected criteria to ensure it is still valid (especially the dates) before re-activating the search.

55. **Notification, Follow up, and Open/Edit** functions are available. Selected occurrences can be deleted from the Search Results window by a right click-delete option. (Deleting occurrences will also reduce the Occ. Found total). The user can **Sort** the selected occurrences and/or save the results in an electronic file format by using the **Save As** function. (When saving to an Excel format, the application does not always save all the information from the Occurrence Description – para 8 – field. Use a CSV file format instead; it is opened in Excel and can be resaved to an Excel file format with no problems).

56. You can print occurrences displayed in the Search Results window by selecting the appropriate **Reports** box and activating the **Print** function. To see an example of the reports, go to FSIS Reports.

Hazard Input

Overview

57. Input a **New** hazard through **Main Menu/File/New** or by clicking on the Hazard icon on the menu bar. An ID number is generated for every hazard entered. The ID number is displayed on the title bar. Once saved, the hazard cannot be deleted – only *Cancelled*. The application updates the hazard status based on the information/fields entered.



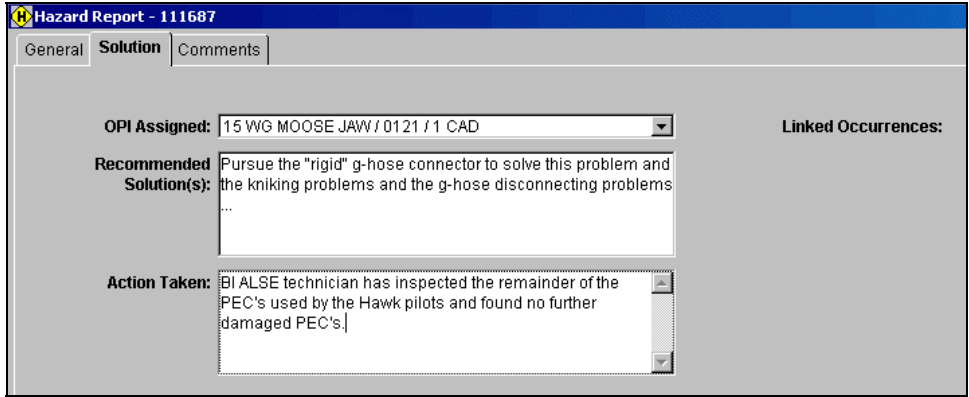
General tab

58. Complete all fields under the General tab at initial stage.

- a. A list of the Hazard types can be found on the DFS Intranet Website at http://airforce.dwan.dnd.ca/dfs/PDF/FSIS/Hazard_Type_e.pdf.
- b. In the **Risk Level** section, the **Selected** field is determined by the Probability and Severity selections and refers to the Risk Assessment Matrix values in the A-GA-135-001/AA-001, Chap 4.

Solution tab

59. Complete all fields under the Solution tab prior to releasing the Hazard supplementary report. The occurrences are linked to the hazards within the occurrence input (Description) window, though the number of linked occurrences is shown under this tab.



Comments tab

60. The WFS, 1CAD, and DFS Comment fields have been added to the Hazard input window. As with occurrences, 1CAD and DFS cannot access their fields for input if the hazard is a “draft” status.

Note

There is no “Follow-up” action functionality for hazards. If the status is Supplemental Sent, the WFSO’s will not have access to their Comment field, unless they use the “Request Amendment” function.

Sending a hazard

61. Once all the information has been entered, the hazard is ready to be released or “sent”. This function is available to any user providing they have “send” privileges. Only “Draft” status reports can be sent.

62. Access the **Send** function via **Main menu/Action** if within the hazard input window, or if on the Explorer screen, through the Right Mouse Click option. The hazard send functions like the occurrence send.

Note


Hazard report text will not be generated in the Auto Generated Message Text box during the “send” function. The “Send” button will be disabled (grayed out) indicating when the send process is complete.

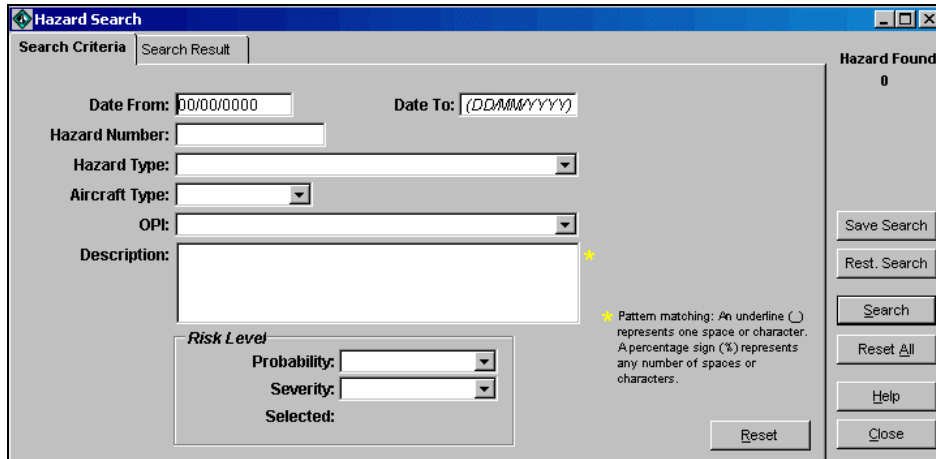
Printing/Saving a hazard report

63. The hazard report can be printed from the Explorer window, the hazard input window, or through the Hazard Search Result window. It can be printed, but there is no function available which allows the report to be saved in an electronic format. See FSIS Reports/Hazard Report.

Hazard Search

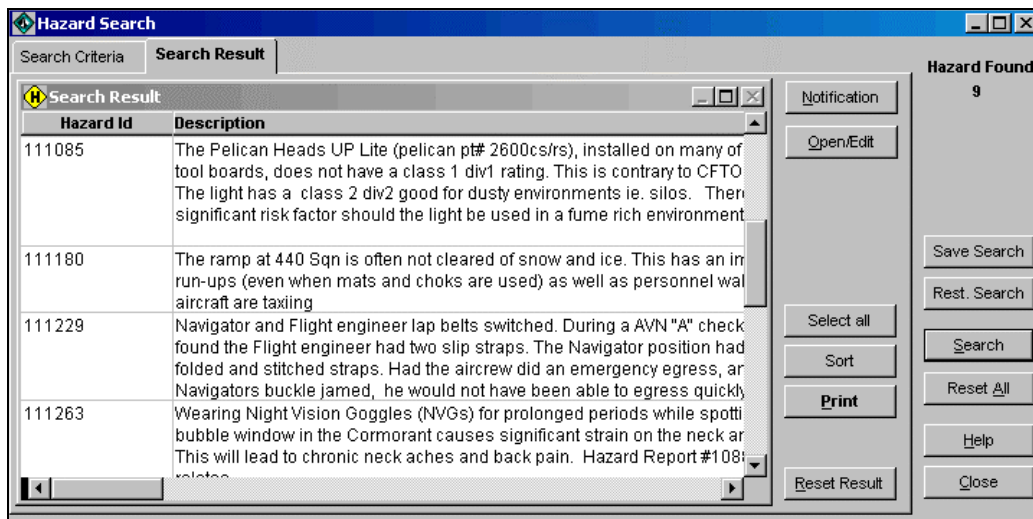
Hazard Search Criteria

64. The hazard search function can be accessed with the hazard search icon  on the main tool bar or through **Main Menu/Tools**.
65. The Hazard search window is divided into the **Search Criteria** and **Search Results** tabs. The available search criteria fields are self-explanatory and the search functionality works like the Occurrence search.



Search results

66. The entire hazard report is available by scrolling across the Search Results window. Most of the functionality found on the Occurrence search results is also found on the hazard search result window. However, there is no function allowing the hazard Search Results to be saved in an electronic format.



FSIS Reports

Occurrence Report

67. The **Occurrence Report** is designed to print all occurrence information. It can be printed from the Search Results window, the Explorer window, and from any Occurrence Input window. It can also be saved to an electronic format on the Explorer window through the Action Item – View Report.

Flight Safety incident reports are produced under the authority of the Minister of National Defence (MND) pursuant to Section 4.2 of the Aeronautics Act (AA), and in accordance with A-GA-135-001/AA-001, Flight Safety for the Canadian Forces. They are prepared solely for the purpose of accident prevention and shall not be used for legal, administrative or disciplinary action.

FSIS 111612 17 JUN 2003 GROUND INCIDENT

Status: amended combined sent

FSOD 416-0011C 17 JUN 2003 14:34
111612 Amend 24 JUN 2003 10:58


Unclassified

Refs: CFTO xxxxx

1. Nil - No Injury
 2. CF188902 / 416 SQN / 1671 / 4 WG / 1CAD
 3. 416 SQN / 1671 / 4 WG / 1CAD
 4. A. 4 Hangar, Cold Lake B. 171234Z JUN 2003 C. MAINTENANCE (2ND AND/OR 3RD LINE)
 5. D
 7. NONE
 8. SMDC LINE FOUND CROSS THREADED: Techs discovered damaged line during transfer valve SI.
 13. INSIDE HANGAR
 17. 514 MAINTENANCE TECHNICIAN Time on Duty Last 48 Hrs: 4 Day of occur: 12
 18. TSN: 3846.6 TSI: 2.8 TSO: Inspection: Periodic 1
 20. EMERGENCY EQUIPMENT WUC: KDCG SER NUM: A3361902 NSN: 1377-01-125-8050 TSN: 9 TSO: TSI: TSII: , Part List: 822242-127, CFTO: C-12-188-000/MS-000 WP 012 00 , The line is being held in 416 SST shop pending disposal. Time since new is expressed in years.
 - EMERGENCY EQUIPMENT WUC: KDCE SER NUM: 2054902 NSN: 1377-01-127-4307 TSN: 7 TSO: TSI: TSII: , Part List: 6035100, CFTO: CF188 WP 012 00 , The valve will be disposed of with the line.
 21. EMERGENCY EQUIPMENT QUARANTINED
EMERGENCY EQUIPMENT QUARANTINED
 22. Technicians were replacing transfer valves IAW C-12-188-000/NS-437 and could not get the SMDC line out of one end of the valve in the rear cockpit. The line is jammed into the valve and will not be removed due to the danger of generating heat. The SMDC line was installed in 1991 and the transfer valve was installed in 1993.
 23. PERSONNEL MAINTENANCE/CANADIAN FORCES TECHNIQUE It is suspected the line was cross threaded during the installation of the transfer valve.
 24. (BRIEF MAINTENANCE PERSONNEL) Technicians will be briefed to install components carefully. CF410 to be raised.
-

Investigation Report

68. The **Investigation Report** prints the occurrence investigation narrative and is only available from the Search Results window.



Page 1 of 1
Printed Thursday, August 28 2003


Occurrence Investigation Narrative

Report Number: 111612

Technicians were replacing transfer valves IAW C-12-188-000/NS-437 and could not get the SMDC line out of one end of the valve in the rear cockpit. The line is jammed into the valve and will not be removed due to the danger of generating heat. The SMDC line was installed in 1991 and the transfer valve was installed in 1993.

Result Summary Report

69. The **Result Summary**, available only from the Search Results window, prints basic occurrence information including the description narrative. The investigation narrative, cause factors, and preventive measures are not printed in this report.



Page 1 of 2
Printed on 28-Aug-2003 11:40

Occurrence Search Result

Occurrence Id	Date / Time	Aircraft	Bird Strike	Injury Category	Category of Occurrence
106908	10-Jan-2002 11:55	CC130/343	<input type="checkbox"/> Arm. Impl.		AIR INCIDENT
<p>Location Description: Lynham</p> <p>Damage E</p> <p>Occurrence Description: OVER TORQUE - On takeoff out of England, with max power set (19,600 "lbs)- the bleed air was selected from override to normal which caused a momentary over torque to 20,000"lbs. A/C continued; conditional inspection carried out with no fault found.</p>					
106878	9-Jan-2002 22:50	CC130/316	<input type="checkbox"/> Arm. Impl.		AIR INCIDENT
<p>Location Description: PAR approach Trenton</p> <p>Damage E</p> <p>Occurrence Description: POSSIBLE LIGHTNING STRIKE - During approach, 10 DME at 2,500 feet ASL to rwy 24 Trenton, a bright flash was seen & a loud bang heard. Suspect a/c struck by lightning. No Lightning/CBs forecast or reported in area, however PAR controller did vector a/c around one area of heavy weather (rain). NOTE: Excessive static heard on headsets and loud sound of hail prior to occurrence.</p>					
106866	8-Jan-2002 17:15	CC130/324	<input type="checkbox"/> Arm. Impl.		AIR INCIDENT
<p>Location Description: Trenton Local</p> <p>Damage E</p> <p>Occurrence Description: GEAR MALFUNCTION - Gear selected up after takeoff, right main remained down and locked. Gear selected down, aircraft rtr wfl.</p>					
106859	6-Jan-2002 17:05	CC130/335	<input type="checkbox"/> Arm. Impl.		AIR INCIDENT
<p>Location Description: Quatar Airport</p> <p>Damage E</p> <p>Occurrence Description: FLAP ASYMMETRY - After heavy weight takeoff of approximately 165,000 lbs; during post takeoff check, flaps raised to 0 percent in 10 percent increments. Flap asymmetric brake engaged at flap 20 position. Checklist carried out for asymmetric flap. Subsequently climbed to 11000 feet and dumped approximately 27,000 lbs of fuel to reduce landing weight. Landed without further incident with flaps 20 selected. On ground, asymmetric flap brake valve found engaged. On inspection of flap brakes, they were found to be out of alignment.</p>					

Sorted Count Report

70. The **Sorted Count Report**, available from the Search Results window, provides the user with a number count for the retrieved occurrences sorted by selected fields. To generate the following example, a search was done to retrieve the occurrences for 01 Jan 97 - 31 Mar 97. The occurrences were sorted by Month and Cause Factor in the Sorted Count report.

Reports

Occurrence
 Investigation
 Result summary
 Sorted Count
 Preventive Measures

Sort by	Sort by	Report description
Month	Cause Factor	Cause Factors 01 Jan 97 - 31 Mar 97

Page 1 of 2
Printed Thursday, May 17 2001


Cause Factors 01 Jan 97 - 31 Mar 97

Sorted Count Report

Month:		
1		
Cause Factor:	Count:	
ENVIRONMENT	11	
Cause Factor:	Count:	
MATERIEL	88	
Cause Factor:	Count:	
PERSONNEL	156	
Cause Factor:	Count:	
UNDETERMINED	21	
Cause Factor:	Count:	
UNIDENTIFIED FOD	1	
Total:	277	
Month:		
2		
Cause Factor:	Count:	
ENVIRONMENT	13	
Cause Factor:	Count:	
MATERIEL	66	
Cause Factor:	Count:	
PERSONNEL	145	
Cause Factor:	Count:	
UNDETERMINED	25	
Total:	249	
Month:		
3		
Cause Factor:	Count:	
ENVIRONMENT	10	
Cause Factor:	Count:	
MATERIEL	89	
Cause Factor:	Count:	
OPERATIONAL	1	
Cause Factor:	Count:	
PERSONNEL	164	

Preventive Measures Report

- 71. The **Preventive Measures** report prints all the preventive measures information for the occurrence.
- 72. When accessed through the Search Results window, it prints the preventive measures for the selected occurrences retrieved by the search.
- 73. When accessed through **Main menu/Report(s)**, it prints the preventive measures for selected occurrences based on the **Proposed Date of Completion** field.



Page 1 of 12
Printed Thursday, August 28 2003

Preventive Measure Report

Occurrence Id/Date: 95689 16-Jun-1999

Short Description: AMEND AOI **Proposed Date:** 1-Jan-2002

Date Completed: 1-May-2001

Detailed Description: The Standard Manoeuvre Guide should be amended to give specific direction about the techniques and procedures for taxiing, to include locking and unlocking the tailwheel.

OPI: 1 CAD HQ WINNIPEG / 0054

Occurrence Id/Date: 97576 29-Oct-1999

Short Description: AMEND SQUADRON ORDERS **Proposed Date:** 1-Jan-2002

Date Completed: 11-Mar-2002

Detailed Description: 3 CFFTS include in their accident response checklist that the civilian flight surgeon on duty and/or the MIR nurse be contacted in case of an accident.

OPI: 3 CFFTS / 2601 / 17 WG / 1 CAD

Short Description: ADDITIONAL/ENHANCED TRAINING **Proposed Date:** 1-Jan-2002


Date Completed: 24-Oct-2002

Detailed Description: FIS does include common errors associated with "review work", like control reversal, in the "tips to instructors" section of the lesson plans. These sections remind instructors that even more advanced students can revert to ab-initio behaviour with little warning. 02: RW FIS candidates are briefed on control reversal and other common errors. Additionally, they are demo'd these traits during Phase II of the course. It is also stressed that these errors can and do occur during the advanced phase of the course.

Aircraft Flying Hours Report

74. The **Aircraft Flying Hours report** is accessed through **Main Menu/Report(s)**, and provides the user means to access the number of flying hours for any aircraft type. **Print Preview** is available for this report but no ability to save as an electronic file.

Page 1 of 1
Printed Thursday, August 28 2003




Flying Hours Report

Aircraft Type Code	Year	Month	Monthly Flying Hours
CC130	2002	1	1463.00
CC130	2002	2	1191.00
CC130	2002	3	1563.00
CC130	2002	4	1563.00
CC130	2002	5	1765.00
CC130	2002	6	1611.00
CC130	2002	7	1676.00
CC130	2002	8	1165.00
CC130	2002	9	1116.00
CC130	2002	10	1485.00
CC130	2002	11	1565.00
CC130	2002	12	904.00
Flying Hours for year:			17067.00
Total Flying Hours:			17067.00

Hazard Report

75. The hazard report can be printed from the Explorer window, the hazard input window, or through the Hazard Search Result window. It can be printed, but there is no function available which allows the report to be saved in an electronic format.

Page 1 of 1
Printed Tuesday, August 20 2002



Flight Safety Hazard Report

Hazard No.: 108816
Hazard Date: Thursday, June 27 2002
Probability: Probable **Linked Occurrence(s):** 0
Severity: Critical

OPI Assigned:
Hazard Location: 17 Wing Winnipeg Military Ramp (Ramp 6)
Originator's Rank and Name: Capt Strawson, 402 Sqn UFSO
Telephone Number: () 257-2050

Description of Hazard: The military ramp is deteriorating at a rate that is causing approximately 10 lbs of FOD per day, even though 402 Sqn continues to conduct daily FOD walks. It is felt that there is a significant probability that FOD will cause major damage to assets and possibly injuries to personnel if not corrected/addressed

Recommended Solution:

Action Taken: DFS contacted WFSO (WO Landers) 15 Aug 02, he advises that contract was put out for tender to start repairs 8 Aug 02. Only one bidder therefore investigation as to why only one, may take two to three mths putting contract off til spring. There is also a plan to do major repairs next year

FSIS Occurrence Status Flowchart

