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SAFETY MANAGEMENT SYSTEMS MANUAL

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CONCORD REGIONAL AIRPORT

This

SAFETY MANAGEMENT SYSTEMS MANUAL

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REVISION NUMBER	REVISION DATE	REVISED PAGE (S)	REASON
ORIGINAL		ALL	Creation/Organization of Safety Management Systems Manual
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AIRPORT SAFETY POLICY

The Concord Regional Airport has made it their policy to "Schedule with Safety". The Aviation Director has issued a **Safety Policy Statement**, which outlines the airport's commitment to safety. This letter is available to all employees from within this manual or upon request from the Safety Manager.

Also the safety objectives and goals for the Operations Department, Maintenance Department, and Other Divisions will be posted annually for employees to view.

The airport safety objectives and goals will be reviewed on an annual basis or when objectives have been achieved.

The safety policy will be reviewed on an annual basis.

MANAGEMENT COMMITMENT – Safety Policy Statement

At Concord Regional Airport safety is a core value of the airport, where the safety and health of each employee comes first. Personnel and equipment in the aviation industry are often exposed to many hazards.   I acknowledge this fact and am personally committed to doing everything possible to eliminate injury and damage in our working environment. The ongoing process of Concord Regional Airport's Safety Management System is ultimately the responsibility of Concord Regional Airport Management. However, each and every employee shall cooperate with management to ensure implementation of this program.

The Safety Committee at Concord Regional Airport will continue to be proactive to identify risks that may pose injury to personnel, or damage to equipment. To keep these risks to a minimum we will continuously examine our operations on the airport and within its facilities. The management team will respond to incidents, conduct audits, communicate and document our findings, and constantly train all of our employees on safety policies.

I have appointed a Safety Committee at Concord Regional Airport which consists of eleven (11) people. They are: City Safety Manager or Designee, Aviation Supervisor Maintenance, Aviation Supervisor Operations, Customer Service Specialist, Senior Aviation Service Worker, Aviation Service Worker, Fire Department Representative, ATC Tower Representative, Non-Airport City Department Safety Representative ,Airport Fuel Vendor, and two (2) Airport Tennant Representatives.

As Aviation Director, I carry the ultimate responsibility for the Safety Management System. I expect that every employee, contractor, and our customers to be active participants in our Safety Program. Everyone shall use safe practices in their everyday operations and report any discrepancies to his/her Manager. The Safety Committee will be held accountable for recommending and monitoring safer steps for the prevention of incidents and accidents. In addition, no employee will be disciplined for reporting a Safety hazard or incident through our "non-punitive" reporting system. Employees that report these hazards will be recognized and commended by the airport.

Richard K. Lewis
Aviation Director

1.1   PROCESS FOR SETTING GOALS

The Aviation Supervisor of Maintenance and Aviation Supervisor of Operations have established the following process's to set and measure goals for the Maintenance Department and the Operations Department.

The Maintenance Department performance goals are established through the review of Reliability Meeting issues, Maintenance Reports and Quality Audits. The SMS database is utilized to determine the frequency and severity and root causes.

The Quality Assurance Supervisor/Manager issues to the Aviation Director a Quality Assurance Audit Summary at the end of each calendar year. This report summarizes the annual maintenance issues, Vendor Audits, Maintenance Inspection Reports and audits carried out on Concord Regional Airport maintenance department. This information is used to measure established performance goals.

The Operations Department performance goals and objectives are established by review of; Accident/Incident reports, Flight and Flight line Irregularity Reports, ATC Shift Notes to monitor whether established procedures/policies are being followed.

Goals and objectives will be reviewed annually for the purpose of evaluation and to set new goals.

2.0   MANUAL PURPOSE

This manual describes, or gives direction to, the systems and processes that have been established in accordance with **Title 14 of the Code of Federal Regulations (14 CFR) Part 139**, to ensure that Safety is built into every aspect of day-to-day operations of Concord Regional Airport. This includes: Flight Operations, Aircraft Maintenance, Maintenance Training, Flight Training, ATC, and Administration. In preparing this manual and all interfacing manuals **FAR 119.65 FAR 121.135, FAR 125, and FAR 135** were used as reference. **Title 49 USC, subtitle VII, part a, chapter 447, paragraphs 44701 and 44702, FAR Order 8740.10, HBAT 99-19, HBAT 00-08, HBAW 00-07, AC 120-66B, AC 150-5200-37, AC 00-58, AC 120-59** were used as FAA Policy and Guidance.

All personnel are required to be knowledgeable of the content of this manual as it applies to their specific area of responsibility.

Other Manuals that are incorporated by reference include the following:

- **General Maintenance SOP**
- **Operations SOP**
- **Training SOP Operations/Maintenance**
- **ATC Procedures Manual (Contract Tower)**

- **Ground Safety Occupational Health and Safety Manual (OSHA) (City Safety Office)**
- **Emergency Response Manual (Airport and Fire Department)**

2.1   MANUAL CONTROL

This manual was developed under the authority of the Aviation Director, Concord Regional Airport by the Safety Manager.

The Safety Manager shall amend this manual as required to keep it relevant and current with the latest Federal Aviation Regulations.

Revisions to this manual will be identified by a vertical black line in the right hand column opposite the amended text.

3.0   GENERAL DESCRIPTION OF SAFETY MANAGEMENT SYSTEM

A Safety Management System (SMS) is a systematic, explicit and comprehensive process for the management of safety risks that integrates operations and technical systems with financial and human resource management, for all activities related to an air operator, airport or an approved maintenance organization's operating certificate.

A safety system is a business-like approach to safety. In common with all management systems, a Safety Management System provides goal setting, planning, and measuring performance. It concerns itself with organizational safety rather than the conventional health and safety at work concerns. A company's SMS defines how it intends the management of aviation safety to be conducted as an integral part of business management activities.

A Safety Management System is woven into the fabric of an organization. It becomes a part of the culture; the way people do their jobs.

The preceding was quoted from federal publication TP 13881 E (Safety Management Systems for Flight Operations and Aircraft Maintenance Organizations).

3.1   CONCORD REGIONAL AIRPORT SAFETY MANAGEMENT SYSTEM

Concord Regional Airport has developed and maintains a fully comprehensive Safety Management System (SMS) in accordance with **FAR 139**.

The Aviation Director has been appointed in accordance with **SS63** as the "Accountable/Responsible Executive". As the Accountable/Responsible Executive, he accepts full responsibility for the airport Safety Management System and for ensuring that personnel adhere to the requirements of that System.

Concord Regional Airport has established an Airport Safety Program. This program is under the control of the Manager of Safety who reports directly to the Aviation Director. The program and the person administering it are independent of either the Maintenance Department or the Operations Department, thereby assuring autonomy.

This program is intended to ensure that the integrity of the Safety Management System remains intact by regular surveillance, review and audit of the system in accordance with Federal Regulations.

This program is documented in the volumes of the Concord Regional Airport Manuals.

4.0   QUALITY ASSURANCE AND SMS

Although Quality Assurance Programs (QA) and Safety Management Systems (SMS) are separate and distinct processes, they are also inseparable. For that reason, whenever the term SMS is used in this manual, it should be taken to mean; All safety components that are built into our processes and procedures and the methods used to verify compliance with these and regulations that are applicable to other airport operations and their functions.

Quality Assurance is a Pro-Active safety assessment that ensures process control and regulatory compliance through constant verification by audit and surveillance process. Quality Assurance ensures a constant upgrading of systems based on the results of audits.

Safety Management facilitates continuous improvements in safety through a similar system of auditing processes and procedures to ensure correct application and relevancy.

4.1 Quality Assurance Programs

In order to be able to carry out meaningful audits of its processes and procedures, an airport must have documented those policies, procedures and standards for every aspect of the operation. Most of the procedures and standards that are used by Concord Regional Airport departments are made mandatory by Federal Aviation Regulations. Others may be airport requirements. Whether they are FAR or airport requirements, in the interest of safety, it is essential for all employees to adhere strictly to these policies and procedures.

Audits will be conducted to confirm compliance with policies and procedures that are contained in the following publications:

- **Airport/City Audit Procedures**
- **Ground Safety Manual Occupational Health & Safety Manual (City SOP)**
- **Technical Advisory Bulletins**
- **Operational Memorandums and Bulletins**
- **Safety Management System Manual**

Guidelines have been developed for use of the Operations Department and the Maintenance Department. The Operations guidelines are found in the Operations SOP book located in the Aviation Supervisor Operations office. The Maintenance guidelines are found in the Maintenance SOP book located in the Aviation Supervisor Maintenance office.

These guidelines must be followed unless the employee has received approval from their immediate supervisor, to deviate from them.

Employees are encouraged to question why certain airport procedures have been established if they do not appear to make sense. All such queries will be taken into account as part of the on-going assessment and improvement program, which is an integral part of SMS.

To ensure regulatory compliance, and compliance with airport and customer procedures and requirements, Concord Regional Airport has developed and uses the following programs:

A. **Maintenance Quality Assurance,**

B. **Airport Operations Quality Assurance,**

C. **Quality Assurance Program.**

4.1 QUALITY ASSURANCE PROGRAMS (cont'd)

A. The **Maintenance Quality Assurance Program** is in accordance with City, Airport, and FAA regulations, policies and procedures, specifically FAR 139. Management of this program has been delegated by the Aviation Director to the Aviation Supervisor Maintenance. A description of this program can be found in the Airport Certification Manual under the Maintenance Section and the Maintenance SOP. Audit procedures and forms are located in these two publications. The program is based on scheduled and random audit and surveillance of functions of the Maintenance Operations. In accordance with **AC 5200-37**, and **FAR 139,** a portion of the audits will be carried out during scheduled maintenance performed at night if applicable.

Vendor Quality/SMS audits will be carried out to ensure vendor compliance with the applicable regulations.

B. The **Operations Quality Assurance Program** has been established to ensure that Concord Regional Airport policies, procedures and standards, as they apply to the Airport Operations Area, are maintained. This is accomplished by scheduled and random audit and surveillance of all aspects of airport operations, from ATC activities to training standards and includes, but not is not limited to:

- Audit of controlled publications and charts
- Regular review and improvement of the procedures contained in the Operations SOP and ATC Letters of Agreement,
- Audit of training records,
- Audit of airport employee workers compensation records with City Human Resources Department,
- Surveillance of employee duty times.

The Aviation Director has assigned the responsibility for the Operations Quality Assurance Program, to the Aviation Supervisor Operations.

The Operations Quality Assurance Program is contained in the Airport Certification Manual.

C. The **Airport Quality Assurance Program** has been established in accordance with **AC 5200-37**, and **FAR 139** and is separate and independent of the Maintenance or Operations Quality Assurance Program.

This program has been developed to ensure the continued integrity of the Concord Regional Airport Safety Management System. This will be accomplished by schedules and random audit and surveillance of the SMS processes and records.

4.1 QUALITY ASSURANCE PROGRAMS (cont'd)

The audit will include, but not limited to:

- Accuracy and completeness of documentation of safety reports.
- Review of the corrective actions taken.
- Review of follow-up actions.
- Audit of controlled documents for currency.

Reporting to the Aviation Director, responsibility for this program is held by the Safety/Quality Assurance Manager.

A description of this program, including responsibilities, is found in this Manual and the Airport Operations SOP/Manual.

5.0   SMS ORGANIZATION SAFETY CHART

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                    ┌─────────────────────────────┐
                    │ Responsible/Accountable     │
                    │ Executive                   │
                    │ Richard K. Lewis            │
                    └─────────────────────────────┘

┌─────────────────────────┐
│ Aviation Supervisor     │
│ Operations              │
└─────────────────────────┘

┌─────────────────────────┐          ┌─────────────────────────┐
│ Aviation Customer       │          │ Aviation Supervisor     │
│ Service Workers         │          │ Maintenance             │
└─────────────────────────┘          └─────────────────────────┘

┌─────────────────────────┐          ┌─────────────────────────┐
│ Aviation Service Workers│          │ Aviation Maintenance    │
│                         │          │ Workers                 │
└─────────────────────────┘          └─────────────────────────┘

                    ┌─────────────────────────────┐
                    │ Safety Manager              │
                    └─────────────────────────────┘
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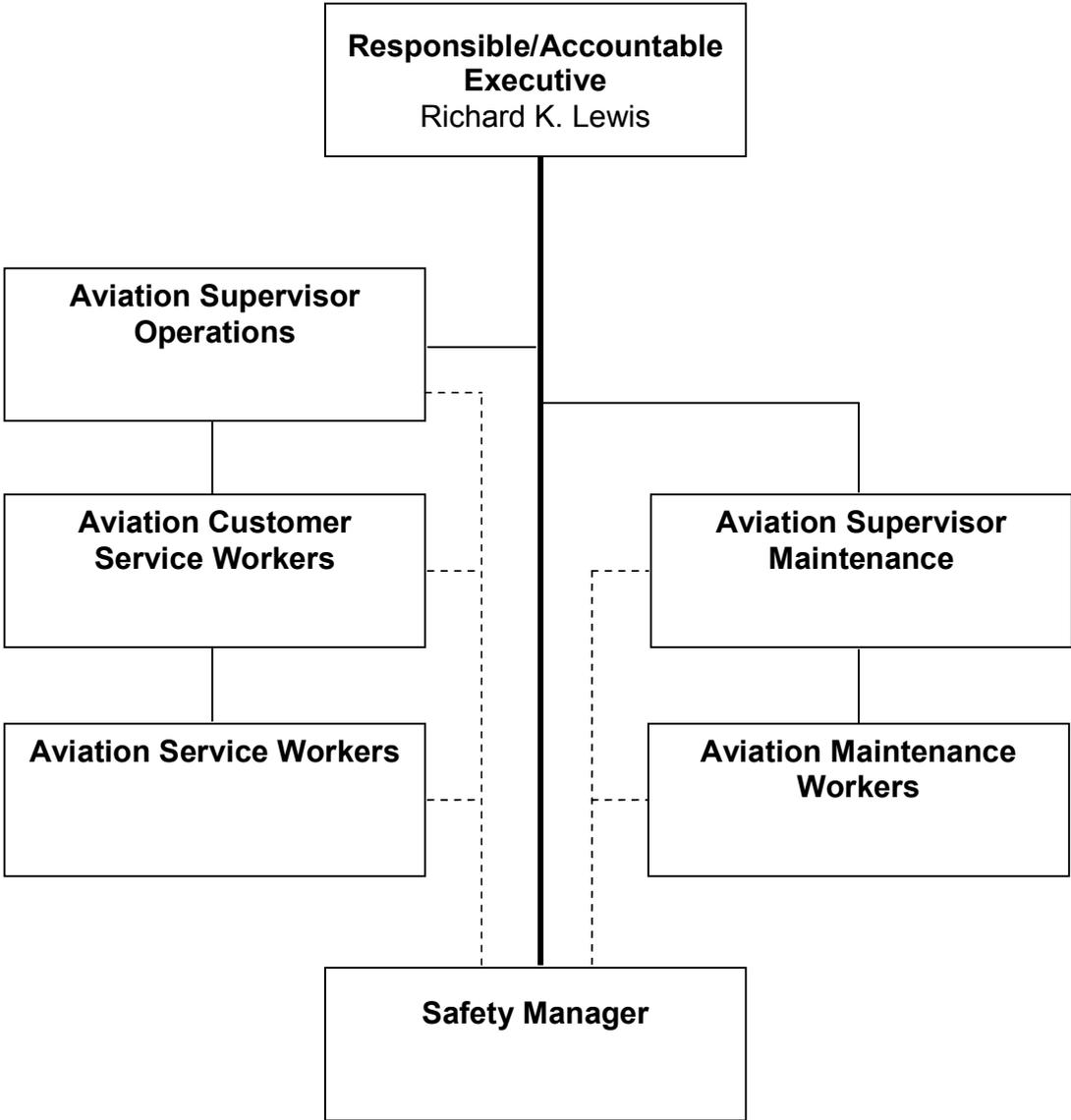
NOTE: Solid lines indicate formal reporting. Dotted lines indicate informal or administrative communications.

5.1 INDIVIDUAL RESPONSIBILITIES RELATED TO SMS

A. ACCOUNTABLE EXECUTIVE (AVIATION DIRECTOR)

Reporting to the Assistant City Manager, the Accountable Executive has been appointed in accordance with **SS 63**. Within Concord Regional Airport, the Aviation Director is the Responsible/Accountable Executive.

The Aviation Director is responsible for the operations and activities of the airport, in accordance with **FAR 139** and **OSHA Regulations**, as applicable. In addition, the Aviation Director is responsible for:

- Establishing Safety performance goals and a means of measuring the attainment of those goals in accordance with current regulations.

- Ensure regular review of the SMS to determine its effectiveness in accordance with current regulations. This will be accomplished by the Manager of Quality Assurance.

B. SMS COMMITTEE CHAIRMAN

The Manager of Safety, who reports to the Aviation Director, chairs the SMS Committee.

The Chairman will **ensure** that the following SMS functions are carried out in accordance with **FAR's**, **City Policies**, **Airport Policies and Procedures**, which include:

- Coordinate the activities of the committee with other members.

- Establish and maintain a reporting system to ensure the timely collection of information related to hazards, incidents and accidents that may adversely affect safety.

- Establish and maintain a safety data system to monitor and analyze trends in hazards, incidents and accidents.

- Ensure SMS and deviation reports are entered into the database and an investigator is assigned to each file.

- Ensure personnel submitting reports are notified of the receipt of the report and are informed about the disposition of the report.

- Communicate to all airport personnel the results of the SMS investigations and all pertinent safety information.

- Keep and distribute minutes of committee meeting.

During periods where the SMS Committee Chairman (Manager of Safety) is absent, the Aviation Supervisor Operations shall ensure SMS reports are entered into the database and assigned an investigator as applicable. The Chairman will keep open lines of communications with the Aviation Director but will not bypass the Functional Managers (Aviation Supervisor, Maintenance, Aviation Supervisor, Operations) on any issue related to safety.

C.   Aviation Supervisor Maintenance

The position of Aviation Supervisor, Maintenance has been appointed in accordance with City and Airport Policy and Procedures.

The Aviation Supervisor, Maintenance meets the experience requirements of Airport/City Policy, Procedures and FAR regulations.

Reporting to the Assistant Aviation Director, the Aviation Supervisor, Maintenance, shall, in accordance applicable regulations manage the activities of Maintenance Operations in accordance with policies set forth in the Airport Maintenance SOP. Accordance with this manual, and Operations SOP, shall control the Safety Management System for Maintenance Operations. And in accordance with airport procedures, shall, when findings resulting from a Quality Assurance Audit or Safety Management System Report, is reported to him:

- Determine what, if any, corrective actions are required and carry out those actions;

- Keep a record of any determination made and the reason for it;

- Communicate any determination regarding a corrective action to the person managing the SMS for the Maintenance Department and Quality Assurance Manager;

- Notify the Accountable Executive (Aviation Director) of any systemic deficiencies and of the corrective action, and

- Maintain open lines of communication with the Aviation Supervisor Operations on all matters concerning Aviation and Ground Safety;

- Evaluate all safety related correspondence and forward pertinent information to the SMS Committee Chairman for distribution.

D. QUALITY ASSURANCE MANAGER

In accordance with City/Airport Policy and FARs, the Aviation Director has assigned management of the Airport Quality Assurance Program to the Safety Manager/Quality Assurance Manager. The Safety Manager/Quality Assurance Manager meets the requirements of the above policies and regulations.

In accordance with these regulations, delegation includes the responsibility for management of the SMS segment that is applicable to the Airport Maintenance functions and Operations functions.

Reporting to the Aviation Director, the Quality Assurance Manager, in addition to his responsibilities, shall participate as an active member of the SMS Committee and ensure that the requirements of Quality Assurance are met. These include but are not limited to:

- Identify hazards and carry out risk management analysis of those hazards;

- Investigate, analyze and identify the cause or probable cause of all hazards, incidents, and accidents identified under the SMS;

- Monitor and evaluate the results of corrective actions with respect to hazards, incidents, accidents and audit findings;

- Monitor the concerns of the civil aviation industry in respect of safety and their perceived effect on the airport and it's departments;

- Will, in accordance with this manual, report to the Aviation Director, the hazards, incidents and accidents identified under the SMS, and

- Will maintain open lines of communication with the Operations Supervisor and Maintenance Supervisor regarding SMS issues related to both departments.

These requirements are identified under the SMS Committee Responsibilities that are described below.

E. AVIATION SUPERVISOR OPERATIONS

Reporting to the Assistant Aviation Director, the Aviation Supervisor Operations is the appointed Operations Manager of the Concord Regional Airport, in accordance with applicable regulations and local policies and procedures. The Aviation Supervisor Operations shall manage the activities of the Airport in accordance with the Airport Certification Manual and all appropriate SOPs. In addition to these responsibilities, the Aviation Supervisor Operations is responsible for the control of the Safety Management System as it applies to the Airport operating Certificate, in accordance with applicable regulations 14 CFR Part 139. And, in accordance with this manual, shall when a finding resulting from the SMS or Operations Quality Assurance Program is reported to him/her;

- Determine what, if any, corrective actions are required and carry out those actions;

- Keep a record of any determination made and the reason for it;

- Communicate the corrective action taken to the Safety Manager;

- Notify the Aviation Director of any systemic deficiency and the corrective action taken;

- Will maintain open lines of communications with the Aviation Supervisor Maintenance regarding SMS issues related to the Maintenance Department;

- Evaluate all safety related correspondence and forward pertinent safety information to the SMS Committee Chairman for distribution;

F. SENIOR AVIATION SERVICE WORKER

In accordance with these SMS procedures, the Aviation Supervisor Operations shall assign responsibility for the management of the Flight Line Operations Quality Assurance Program, to the Senior Aviation Service Worker. Included in this assignment are the following responsibilities relating to management of the SMS for the Operations Department, in accordance with this manual, Airport certification Manual, the Senior Aviation Service Worker shall:

- Conduct a hazard identification and risk management analysis of the operation of the Airport Flight Line;

- Investigate, analyze and identify the probable root cause and contributory causes of all incidents, accidents, and safety deficiencies identifies by the program;

- Monitor and evaluate the results of corrective actions with respect to hazards, incidents, accidents and audit findings;

- Monitor aviation industry safety concerns that could affect the Flight Line Operations;

- Participate in the activities of the SMS Committee and ensure that the requirements of Federal Aviation Regulations are met; and

- Will maintain open lines of communication with the Safety Manager/Quality Assurance Manager on SMS issues related to the Maintenance and Operations Department.
  .

These requirements are identified under the responsibilities of the Safety Committee, listed below. And, in accordance this Manual and Operations SOP, report to the Aviation Supervisor Operations, the hazards, incidents, and accident identifies under the SMS.

G. SAFETY MANAGER

Reporting to the Aviation Director, the Safety Manager, in addition to being the Chairman of the Safety Committee, is responsible for:

- Federal Aviation Regulatory and Occupational Health and Safety issues in the airport areas of operation;

- Investigating, analyzing and identifying the cause or probable cause of all hazards, incidents or accidents, relates to Aviation and Occupational Health and Safety, identified by the SMS process.

- Administration and continuing improvement of the company Safety Program;

- Administration and coordinating continuing improvement of the Airport Emergency Response Plan with the Fire Department;

- Details on these programs can be found in the following, controlled document:

  - Occupational Health and Safety Manual, City
  - Safety Management System Manual; and
  - Airport Emergency Response Plan Manual.

As a member of the SMS Committee, the Safety Manager will maintain open lines of communications with all department heads on issues related to OSHA and Flight Safety.

H. SAFETY REPRESENTATIVES

Concord Regional Airport has assigned OSHA and Flight Safety responsibilities to personnel in all departments.

Reporting to the SMS Committee, the Safety Representative is responsible for conducting quality audits of Safety Equipment and conditions at their location that could be hazardous to employees. Unsafe conditions and/or equipment are brought to the immediate attention of the department manager who will ensure that appropriate corrective action is taken.

All such action is documented and forwarded by the Representative to the SMS Committee. The SMS Committee will review the information to ensure that appropriate action was taken, and may make further recommendations to the Director for improved policies, procedures or equipment etc.

6.0 TRAINING

In accordance, **FAR 139.303**, the Aviation Supervisor Operations and the Aviation Supervisor Maintenance and all persons directly connected to the airport SMS will receive and shall successfully complete a safety related, initial training course that includes the following subjects:

a. **Maintenance and Flight Safety philosophy;**
b. **Human Factors;**
c. **Accident Prevention;**
d. **The responsibilities of safety personnel;**
e. **Risk Management;**
f. **Accident/Incident reporting; and**
g. **Incident investigation.**

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"Initial" and "Recurrent" training on policies and procedures of the airport SMS that are contained in this manual and manuals incorporates by reference, shall also be provided to all personnel assigned safety related duties.

The Safety Manager/Training Manager will determine the content and frequency of recurrent training.

7.0   SMS COMPONENTS

The Concord Regional Airport SMS is all inclusive and incorporates the following major components:

- An Operations Quality Assurance Program;
- A Maintenance Quality Assurance Program;
- An Occupational Health and Safety Program (including Aviation OSHA) from City Safety;
- A program of confidential, Employee Safety Reporting;
- An SMS Committee; and
- An Airport Emergency Response Plan.

Built into the major components that are listed above are sub-components that are in accordance with **FAR 139.**

- A safety Policy on which the system is based.
- A process for setting goals for improvement of Aviation Safety and for measuring the attainment of those goals.
- A process for identifying Hazards to Aviation Safety and for evaluating and managing the associated risk.
- A process for ensuring that personnel are trained and competent to perform their duties.
- A process for internal, non-punitive, reporting and analyzing of hazards, incidents and accidents and, for taking corrective actions to prevent their recurrence.
- A document containing all Safety Management System processes and a process for making personnel aware of their responsibilities with respect to them.
- A process for conducting periodic reviews or audits of the Safety Management System and reviews or audits for cause and corrective action of safety concerns, incidents or accidents.
- Any additional requirements for the Safety Management System that are prescribed under the Code of Federal Regulations.

8.0 THE SMS COMMITTEE AND HOW THE SYSTEM WORKS

Maintained by the SMS Committee, the SMS program is based on pro-active and reactive processes.

Pro-active by means of:

- Audits;
- Policy and Procedure Assessment; and
- Hazard Identification.

Reactive by means of reports based on:

- Hazard Identification;
- Accident/Incident Reports;
- Database Assessment and Review; and
- Risk Analysis.

8.1 SMS COMMITTEE PURPOSE

The purpose of the Committee is two fold:

- To administer the policies and procedures of the Airport Safety Management System in accordance with **FAR 139** and **AC 150-5200-37.**

- To administer the policies and procedures of the US Occupations Health and Safety Regulations, and the Aviation Occupational Health and Safety Regulations, in accordance the US Department of Transportation, and US Department of Labor Regulations.

NOTE: *In case of duplication requirements between the US Labor Regulations and the US Aviation (FAA) Regulations, the more stringent will be applied.*

8.2 SMS COMMITTEE RESPONSIBILITIES

- Establish and maintain a reporting system to ensure the timely collection of information related to hazards, incident and accidents that may adversely affect safety;

- Identify hazards and carry out analysis of those hazards;

- Investigate, analyze and identify the cause or probable cause of all hazards, incidents and accidents identified under the safety management system;

- Establish and maintain a safety data system, to monitor and analyze trends in hazards, incidents and accidents;

- Monitor and evaluate the results of corrective actions with respect to hazards, incidents and accidents;

- Monitor the concerns of the civil aviation industry in respect of safety and their perceived effect on the Maintenance and Operations Departments;

- Determine the adequacy of the training provided to the person responsible for Maintenance, Operations and other personnel who are assigned duties related to the safety management system;

- Report to the Aviation Supervisor Maintenance and Aviation Supervisor Operations, the hazards, incidents and accidents identified under the safety management system or as a result of a Quality Assurance audit of the Maintenance Department, Operations Department or the Safety Management System; and

- Provide Progress Reports to the Aviation Director.

8.3 SMS COMMITTEE MEMBERS

Chairman	-	**Safety Manager/Training Manager**
Member	-	**City Safety Manager**
Member	-	**Maintenance Supervisor**
Member	-	**Operations Supervisor**
Member	-	**Customer Service Specialist**
Member	-	**Senior Aviation Service Worker**
Member	-	**Fire Department Representative**
Member	-	**ATC Tower Representative**
Member	-	**City Department Non-Aviation Rep**
Member	-	**Airport Tennant Representative**
Member	-	**Airport Tennant Representative**
Member	-	**Airport Fuel Vendor**

Members of the SMS Committee are responsible for: risk assessment, accident/incident investigation and determining the root cause of all safety concerns, accidents, incidents, unscheduled events and non-conformances that relate to their area of expertise.

The Committee is also responsible for the follow-up of all corrective actions that are implemented by the Aviation Supervisor Maintenance or Aviation Supervisor Operations.

The Committee Chairman is responsible for: "Filtering" reports to the responsible Committee member and ensuring complete documentation of all safety related issues. In addition, the Chairman will ensure that a secure database of all safety related issues is maintained indefinitely.

8.4   COMMITTEE MEETINGS

At a minimum of once per month, at pre-scheduled dates that are determined by the Chairman of the SMS Committee, the Committee will meet. The Chairman will table all raised safety concerns, incident or accident reports, audit reports, pilot reports, employ reports, relevant deviation reports and any system enhancement recommendations that may have been received.

Using the **SMS Process Flow Chart** (Figure 1 below), the committee members address all safety concerns that are directed to them.

The Committee will review all actions taken resulting from auditing and establish a follow-up schedule.

They will review relevant pilot reports and deviation reports to ensure adequate action has been taken to mitigate recurrence of the event.

Using the historic database, the Committee will look for trends that identify systemic problems.

System enhancement recommendations will be reviewed and forwarded to the appropriate head if the Committee concurs with recommendations.

The Chairman will ensure documentation and strict control of all documentation of safety related issues and the ongoing monitoring of corrective actions.

NOTE: The Aviation Supervisor Maintenance or Aviation Supervisor Operations, as applicable, holds responsibility for determining and implementing corrective actions.

The dotted line that surrounds the SMS Flow Chart is named "System Evaluation", and represents the independent audit of the SMS that is carried out under the Quality Assurance Program.

9.0   SMS PROCESS FLOW CHART
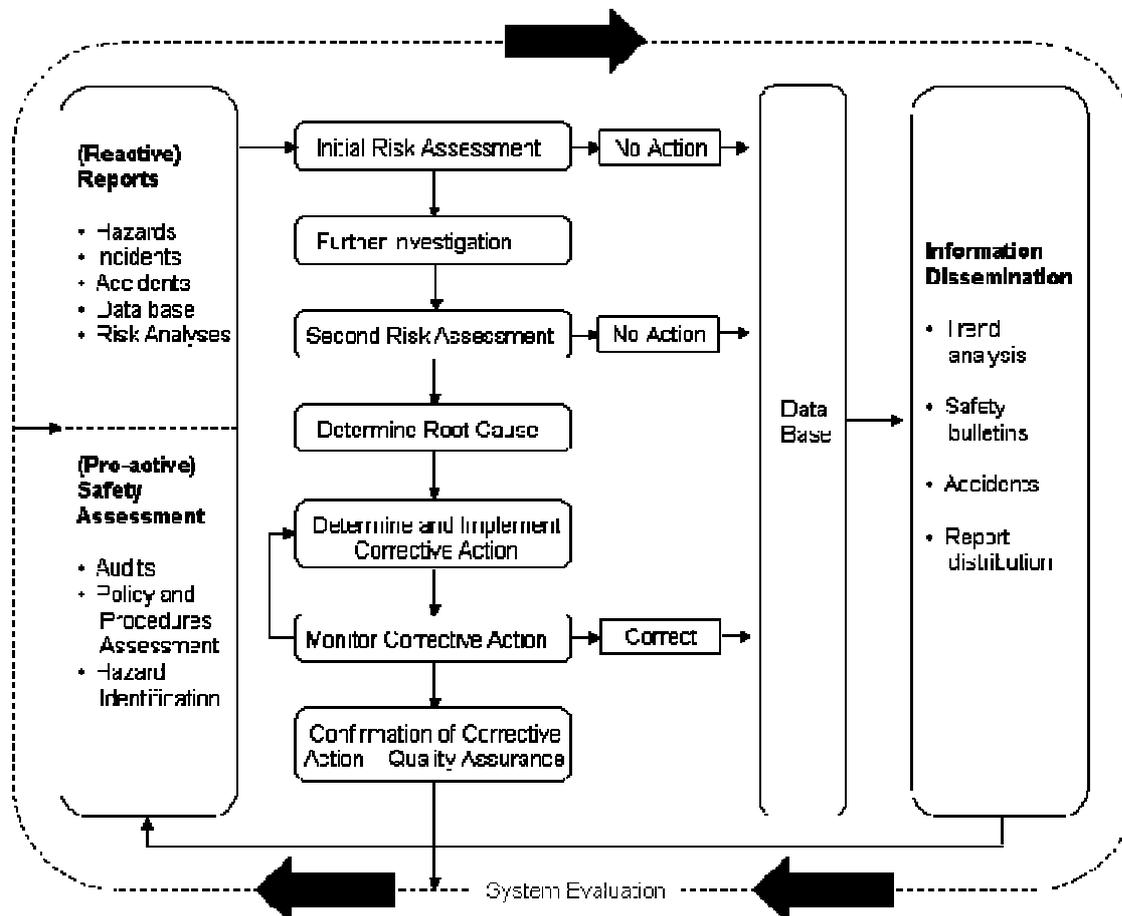
10.0   EMPLOYEE REPORTING

All employees are responsible for reporting observed hazards, incidents or accidents to their supervisor or the SMS Committee. This will ensure that all events receive the appropriate investigation in order to:

- Identify the underlying initial contributing factor(s) that caused the event (root cause), and identify the action required to minimize the chance of recurrence;

- Satisfy any regulatory requirement for reporting and investigating as per the Code of Federal Aviation Regulations;

- Provide a factual record of the circumstances of the event or hazard to allow others to learn from the situation; and

- Categorize the underlying causes and establish the appropriate remedial and continuous improvement action.

All reports are treated as strictly confidential. The reporter may remain anonymous if they choose. However, in case more information is required, it is preferred that the reporter identifies himself or herself. In all cases, employees will receive feedback on what, if any, action was taken or planned. Employees who choose to remain anonymous will receive this feedback by means of a general notification in Memo for or through other communiqué systems.

10.1 NON-PUNITIVE REPORTING POLICY

In accordance with **AC 150-5200-37**, Concord Regional Airport has a policy that ensures employees who report mishaps, risk exposures, safety hazards, incidents or accidents will not be subject to disciplinary action by the airport with a few exceptions such as the following (which could create or worsen risk exposures):

- Premeditated or intentional acts of violence against people or damage to equipment/property;

- Actions or decisions involving material negligence which, in the airport's judgment, no reasonably prudent employee of relevant training and experience would take; or

- Failure to report safety incident or risk exposures as required by Concord Regional Airport's operating procedures and/or this policy.

Employees who act irresponsibly in one of these ways remain exposed to disciplinary action. An employee's compliance with reporting requirements will be a factor to be weighed in Concord Regional Airport's decision-making in such circumstances.

Outside theses specific and rarely invoked exceptions, employees who make honest mistakes or misjudgments will not be subject to blame-provided that they report such incidents in a proper fashion.

10.2 HOW TO REPORT

Employees may choose any method to report their concerns as long as it is a written report containing as much pertinent information as possible. However, employees are urged to use the SMS Report Form. This multi-purpose report is designed to meet all the SMS reporting requirements and eliminate the workload and confusion associated with multiple reports. When submitted, the SMS Report Form is automatically sent to the Safety Manager and either of the Supervisors or all three.

Alternative reporting options include e-mail to the Safety Manager, e-mail to the Supervisor, e-mail to the respective Department Safety Committee Member or fax to any of these safety representatives.

Verbal reports may be used to start the investigative process but these must be followed up with a written report.

Reports should contain all the details to fully describe the incident or conditions that present a hazard.

10.3   WHAT TO REPORT

In order not to over burden the reporting system or the employee with unnecessary paperwork, it is not required that all minor workplace hazards be addressed by means of the official reporting system.   Common sense is the key to deciding what should or should not be reported.   Some events or concerns are considered to be mandatory, while others are not.   An unsafe practice or condition in the workplace may not require the filling out and submission of a report if:

- It is corrected immediately and was obviously caused by a "one off" event that was not the result of a system or procedural failure.   An example of this would be;

- Someone neglecting to use the appropriate safety equipment although:

- The equipment was available;

- There was a policy in place that required its use;

- The appropriate training had been provided; and

- The person complied with the policy when reminded of his/her oversight.

HOWEVER, WHEN IN DOUBT, REPORT IT.

The airport also encourages employees to identify and report on any process or procedure that does not fulfill the requirements of the job that they are performing.   The reporter is also encouraged to offer solutions for enhancement of the process or procedure.

The following list is not all-inclusive.   It is intended to give the employee an understanding of what conditions to be vigilant of and what type of events require mandatory reporting.   Again, if any doubt exists as to whether or not something is reportable, report it:

- Any incident that requires a Service Difficulty Report (SDR) to be filed as per FAR 139. (Notam)

- Reportable aviation occurrences as defined in the National Transportation Safety Board Aeronautical Information Manual Part 830 must be reported to the NTSB without delay.

- Any incident where the aircraft sustains damage requiring repair.

- Any air ground incident (accident) in which someone suffers injury or death.

- Any incident where the aircraft sustains damages or structural failure that adversely affects the structural strength, performance and/or flight characteristics.

- Suspected Hard landings observed by flight or ground personnel.

- Runway incursions.

- Excessive duty times by employees.

- Lack of adequate training and recurrent training.

- Poor communications between operational areas.

- Incorrect or inadequate procedures and failure to adhere to standard procedures.

- Lack of, or out of date, technical and flight publications or charts and plates.

- Inadequate tool and/or equipment control.

- OSHA/Aviation OSHA related concerns or events.

Other reports that are fed into the SMS for investigation, analysis and possible corrective action include the following:

- Relevant Deviation Reports.

- Finding and Non-Conformance Reports resulting from internal audit.
.
The Quality Assurance Auditors and Supervisors will supply these reports as appropriate.

Audit findings, including findings that result in a Non-Conformance, will usually be addressed during the audit period. However, the finding and resulting corrective action must be supplied to the Committee Chairman. This will ensure that all system failures are captures and entered in the database for historical reference and future follow-up. (See, Audit Findings below).

10.4   REPORT PROCESSING

All reports are forwarded to the attention of the SMS Committee Chairman/Safety Manager.

Employee Safety Reports   will be reviewed by the Chairman upon receipt to determine which direction the report should be channeled. This will be; the Aviation Supervisor Maintenance, the Aviation Supervisor Operations, or the Safety Manager, or a combination if the report has combined maintenance and operations implications.

Pilot Reports   are forwarded by the customer service or operations department to the Chairman who will retain a copy and forward a copy to the Safety Manager for committee resolution.

Deviation Reports   are forwarded by the operations department to the Chairman who will retain them for committee resolution.

Quality Assurance Findings   are forwarded by the auditor and supervisors, to the Committee Chairman who will retain them for the committee.

With the exception of Quality Assurance Audit Findings which are described below, all reports will be addressed by the responsible person (Supervisor or t Safety Manager) with the level of priority they determine as necessary.

The Quality Assurance Findings will be analyzed, with the reports and recommendations given to their "Functional Department Head" (Maintenance or Operations) for corrective action.

The Aviation Supervisor Maintenance or Aviation Supervisor Operations will take whatever action, or non action as they determine is necessary and report such action back to their committee member (Quality Assurance Manager or Safety Manager) and also up to the Assistant Aviation Director or Aviation Director.

The Aviation Supervisor Maintenance or Aviation Supervisor Operations will provide feedback on corrective actions to their respective departments so that staff can see the results of their commitment to safety

Audit Findings and Non-conformances are addressed at the time of the audit and as described in the applicable manuals (Maintenance SOP, Operation SOP, and ACM). Conclusions of the findings and non-conformances are tabled at the SMS Committee meetings. The Committee will ensure that a follow-up review of the corrective action taken.

All pertinent information from audit and non-conformance findings will be entered into the SMS database.

11.0 QUALITY ASSURANCE FINDINGS

Audit findings will be investigated by the Quality Assurance Auditor (internal or external), Supervisor, or Safety Manager as applicable, to the extent necessary to determine the root cause and any contributory factors.

The results of the investigation will be forwarded to the Aviation Supervisor Maintenance or Aviation Supervisor Operations as applicable.

The Aviation Supervisor Maintenance and Aviation Supervisor Operations will determine what, if any corrective action is required and take that action. This will be accomplished with pertinent department personnel. The Aviation Supervisor Maintenance and the Aviation Supervisor Operations will document all corrective action and non-action and include the following minimum information:

- Reference to the original audit finding and any relative information.

- The immediate or short-term corrective action that was taken.

- The long-term corrective action, taken or planned.

- A summary of the logic applied to arrive at the corrective action.

- If the decision was that no action was necessary; the reason for this decision.

- Details on any follow-up to corrective action that may be required and the scheduled date of that follow-up.

- Copies of this documentation will be forwarded to the Assistant Aviation Director or Safety Manager as applicable, who will ensure that it is recorded into the SMS database.

12.0 HAZARD IDENTIFICATION

The SMS committee shall gather information from a variety of sources to determine the existence of hazards. These information sources include:

1. Hazard/Incident/Accident Reports,

2. Minor injury reports,

3. Safety Inspection reports,

4. Industry data, (i.e. manufacturers and other operators)

5. Safety data recording systems, (SDRs, etc.)

6. Government reports,

7. Other relevant information, and

8. Committee reviews of:

   - Existing safety programs,

   - MSDS (Material Safety Data Sheets) for new products introduced into the airport or city, and

   - Airport and industry trends.

12.1   HAZARD IDENTIFICATION PROCESS

The SMS committee shall, at the monthly meeting, review any information received from the sources above. The purpose of the review will be to identify specific hazards and the potential impact on airport operations and/or the health and safety of employees.

All hazards reported to, or identified by, the committee shall be documented in a database. The committee shall review information in the database to identify airport trends.

Hazards identified through this process shall be assessed using the risk management process in order to determine the most effective method to eliminate or mitigate the hazard.

Any hazard reported to, or identified by, a committee member that poses an immediate risk to airport operations or the health and safety of employees or airport equipment shall immediately be brought to the attention of the supervisor with functional responsibility. The risk shall be assessed and appropriate action taken. The committee member will report to the committee the circumstances of these occurrences.

13.0 RISK MANAGEMENT

13.1 DEFINITITIONS

Hazard: Anything that, given the right set of circumstances, can cause injury to personnel and/or damage airport facilities, equipment or reputation.

Risk: Risk is measured in terms of severity and probability that an identified hazard will cause damage.

Probability: An expression of the likelihood a "hazard" could cause an occurrence.

Severity: The consequences that could arise from a "worst case scenario" for a particular hazard.

Mitigation: Measures taken to eliminate a hazard or reduce the probability or severity of a risk.

Risk Tolerance: Risk tolerance is the amount of risk Concord Regional Airport is willing to accept.

Risk Management: Risk management is the process of identifying risk, assessing their implications, deciding on a course of action, and evaluating the results.

13.2 RISK MANAGEMENT POLICY

Concord Regional Airport will identify and analyze hazards and determine the most effective preventive measures the airport can use to eliminate or mitigate the risk the hazard poses to the airport.

13.3 HAZARD IDENTIFICATION

Concord Regional Airport shall use three methods to identify hazards: process analysis, trend analysis and reports from personnel.

Process Analysis:
Individual steps of a process are detailed and analyzed by management and employees involved to determine the existence of hazards and identify possible preventive measures to put in place to mitigate potential side effects of these hazards.

Trend Analysis:

The SMS committee and/or management personnel will review and compare safety records to determine if repetitive, isolated incidents are indicative of an unrecognized hazard. When hazards are identified, they will be analyzed to determine the most efficient preventive measure available to mitigate the effects of the hazard.

Personnel Reports:

Employees are required to report hazards using the monthly inspection forms or the airport Hazard/Incident/Accident report. Management will investigate report and identify and implement any required preventive measures.

13.4   RISK ASSESSMENT

All identified hazards will be reviewed and be assigned to either the corrective action program or be subjected to risk analysis. The corrective action program will be used when a hazard has a straightforward and affordable solution, which must be complied with due to either regulatory or operational requirements. All other hazards shall be subjected to a risk assessment. This assessment will be assigned to an SMS committee member and may involve the responsible supervisor. Each assessment will be reviewed at committee meetings. The risk statement tab of the Incident Report Database form is used to document the process.

The risk assessment process is broken down into five steps:

Step 1: Determine a Severity rating.

The assessor will determine the severity of the consequences a hazard presents in a reasonable worst-case scenario. The assessor shall rate the severity against the various criteria of the assessment form and assign a High, Medium or Low rating to each criterion. The assessor then shall assign an overall rating to the hazard based upon the different criteria and his knowledge and experience.

The Severity Ratings are:

- Catastrophic
- Critical
- Major
- Minor
- Negligible

Step 2: Determine a Likelihood rating.

The likelihood that a hazard will cause an incident is calculated by assessing the effectiveness of any existing preventive measures already in place. The assessor shall list the preventive measures on the form and rate these against the following criteria:

1. Justified
   Considering the resources required to implement the preventive measure: are the benefits justifiable?

2. Address the Issue
   Is the preventive measure addressing the hazard it is designed to prevent?

3. Sufficient
   Does the preventive measure have sufficient capacity to deal with the issue it is designed to prevent?

4. Reliable
   Is the preventive measure adhered to? Can it be trusted to be effective? Are there any conditions where it may not be effective?

5. Assigned
   Is there someone responsible to ensure the preventive measure is used? Can they follow-up and modify the system to strengthen the preventive measure if required?

6. Specific Instructions
   Are there specific instructions for the preventive measure? Do these effectively describe proper procedures for the functions and operations of the preventive measures?

7. Communicated, Trained, Documented
   Are the preventive measures described in company publications and documentation? Are these continuously verified to ensure they remain current, clear and effective? Are personnel trained on how to use the preventive measures?

8. Tested, Practical
   Have the preventive measures been tried in practice? Are they practical?

The assessor must assess all eight criteria. If any criteria is weak or missing the effectiveness of the preventive measure will be reduced. The effectiveness rating for preventive measures are:

1. Extremely Unlikely highly unlikely to occur due to very effective and robust prevention systems

2. Unlikely reduced chances of occurrence due to good prevention systems

3. Likely could occur due to deficiencies in the prevention systems

4. Extremely likely likely to occur due to inadequate prevention systems

5. Certain very likely to occur due to absent prevention systems

When there are more than one preventive measure, an overall rating of the various preventive measures is assigned.

Step 3: Determine the Exposure Level

The exposure level is determined using the knowledge of current airport practices, policies and procedures. Past experience and knowledge of future operations is used to assign an exposure level. The exposure levels are:

1. Never   Occurs once every two or three years
2. Hardly Ever   Occurs once per year
3. Often   Occurs once or more per month
4. Very Often   Occurs once or more per week
5. Continuously   Occurs once or more per day

Step 4: Assign a risk priority rating to the hazard.

The Incident Report Database calculates the risk priority rating of a hazard. The Severity Rating, the Likelihood Rating and the Exposure Level are entered into the database on the Risk Statement Tab. The database then automatically calculates a risk priority rating.

The calculations made are as follows:

Variables
1. Severity
   a. Catastrophic (110);
   b. Critical (100);
   c. Major (65);
   d. Minor (15);
   e. Negligible (10).

2. Likelihood
   a. Extremely Unlikely (0);
   b. Unlikely (20);
   c. Likely (70);
   d. Extremely Likely (90);
   e. Certain (110).

3. Exposure
   a. Never (0);
   b. Hardly Ever (.5);
   c. Often (1);
   d. Very Often (1.1);
   e. Continuously (1.4).

Equations
1. Risk = Likelihood + Severity
2. Risk Analysis = (Risk * Exposure)
3. Risk Relative = Risk Analysis / 3.08 (Note: result is rounded to nearest whole number)
4. Risk Zone = (Risk Analysis) = <104 (Low); <145 (Medium); >145 (High)
5. Relative Calculated Risk = Risk Zone

Example:
Exposure = Very Often = 1, Likelihood = Likely = 70, Severity = Major = 65

- Risk = Likelihood (70) + Severity (65) = 135
- Risk Analysis = Risk (135) * Exposure (1.1) = 148.5

- Risk Relative = Risk Analysis (148.5) / 3.08 = 48
- Risk Zone = (Risk Analysis) = "High"
- Relative Calculated Risk = Risk Zone (High)

(The source of this formula is The Medallion Foundation of Alaska.)

The risk priority rating is used as guidance to assign priorities to ensure mitigating or rectifying action is taken. The following levels will be used when setting the priorities.

Rating Level	Priority
75-100	Improvement is a high priority: Act immediately.
50-75	Improvement is priority: Act this year.
40-50	Issue is important. Continue to monitor, improve as needed.
25-40	Improvement is not a priority. Review opportunity next year budget.
Less than 25	Improvement is not a priority.

Step 5: Assess Potential Preventive Measures

Identify other potential preventive measures the airport could use to help reduce the severity of the consequences or the likelihood of occurrence.

The assessor shall assess the effectiveness of these potential measures and assign an effectiveness rating to the measure. He then plots the likelihood rating with the consequences rating and exposure level to determine the risk priority rating of the hazard with new preventive measures.

13.5 RISK MANAGEMENT

The responsibility supervisor will be provided with the risk assessment form. The supervisor will review the risk rating for the hazard and any potential preventive measure and determine the best approach for the airport to follow to either eliminate or mitigate the hazard.

13.6 MONITOR RESULTS

Decisions taken by supervisors to eliminate or reduce a risk shall be promulgated to all employees affected. An implementation plan will be developed and carried out. The SMS committee will monitor the implementation to ensure completion of the process.

Monitoring will ensure the following four things occur:

- **A responsible person is assigned:**
  Somebody will be assigned the responsibility to implement the mitigating process. This person will require the authority to perform his duties.

- **A due date is set:**
  A date by which the mitigating process is to be implemented shall be set.

- **The mitigating process:**
  The responsible person will have the choice of eliminating, mitigating, monitoring or transferring the hazardous condition. He shall document the course of action chosen and provide substantiation for this choice. The substantiation is not required if the recommended course of action is chosen.

  Complex mitigating action can be broken into implementation targets. This will allow the responsible person to delegate portions of the mitigation action and provides him a tool to monitor progress.

  Once the mitigating process is completed the responsible person will document the action taken and enter the date completed in the Date completed field of the database.

- **A review date is set:**
  The SMS committee shall review the effectiveness of any mitigating process implemented to ensure the process is effective and cost efficient. Individual members of the committee may be tasked to review the process and report to the committee on the effectiveness of the process.

  The committee will also review any items determined to require budgetary considerations before the next business year's budget is developed. This review will be to prioritize the items that should be considered in the budget plan and present these to the Aviation Director.

13.7 DOCUMENTATION

All hazards subjected to the risk analysis process will be documented on the Risk Assessment form (appendix A).

Items generated by the SMS system will be assigned a tracking number matching the SMS file number of the generating item.

If the form is completed electronically, it should be saved in PDF format to prevent the file from being inadvertently modified if opened for review. Completed reports shall be kept in the appropriate file folder of the Safety Database directory.

Integrated Risk Assessment forms completed on paper will be scanned and a copy will be kept in the appropriate file folder of the Safety Database directory. The hard copy will be kept by the Safety Manager and will be accessible to the SMS committee and members of the airport management.

14.0 INVESTIGATION PROCESS

All incidents and accidents will be investigated to identify the root cause of the occurrence. Hazards that do not show obvious solutions shall also be investigated. The following are components of an investigation.

- Reference Material:
  Identify and review all documentation pertinent to the occurrence. The investigator must be familiar with policy and procedures as well as regulations that may have an impact on the occurrence. Examples of reference material are:
    - Regulations
    - Customer Requirements
    - Airport policies and procedures
    - Maintenance/Operations SOPs, etc.

- Interview Personnel Involved:
  Personnel involved in an occurrence and witnesses to the occurrence need to be interviewed to find out what happened. The purpose of the interview will be to identify issues that contributed to the occurrence. The results of the interview must be documented.

- On Site Investigation:
  On occasion it may be necessary to attend the site of the occurrence to see if there are environmental conditions that may have contributed to the occurrence. Pictures may be used to document the existence of these conditions.

- Document Extent of Damage:
  Pictures of damage caused by an occurrence shall be taken and provided to the SMS committee for review and to support the database file. The financial impact of the occurrence shall also be estimated.

- Document Extent of Injuries:
  If personnel are injured as a result of the occurrence, the extent of the injuries as well as the impact on the personnel involved shall be documented. All injuries requiring medical attention shall also be reported to the City HR and Safety Departments for required reports to be filed.

Once an investigation is completed, the investigator shall document the investigation. The investigator shall summarize what happened, identify root causes and provide suggestions for corrective action. The investigation shall be recorded into the database.

The results of safety investigations shall not be used to apportion blame. If management feels disciplinary action is required, a duplicate investigation will be required.

15.0   DOCUMENTATION AND RECORDS RETENTION

Copies of all reported hazards, incidents and accidents, complete with documented actions, and meeting minutes to the Committee, will be retained indefinitely by the Chairman and Assistant Aviation Director. These will be provided to the NTSB, FAA, Department of Labor (OSHA) and Quality Assurance Auditor as requested, for review and auditing purposes.

16.0   SMS AUDIT AND ASSESSMENT

The Safety Management System described in this manual will receive constant monitoring and review by Concord Regional Airport's Quality Assurance Program. In addition, management will complete an audit of the SMS initially within 6 months of commencement of the program and annually, thereafter.

All audit findings and assessments will be documented on the appropriate checklist and findings of the audit forwarded to the Safety Manager and Aviation Director.

The Supervisory Staff with the assistance of the Safety Manager will implement corrections and changes to the SMS as directed by the Aviation Director.

VI.   APPENDICES

Appendix A-Risk Assessment Forms
Appendix B

VII   Other Forms

CONCORD REGIONAL AIRPORT INTEGRATED RISK ASSESSMENT FORM PAGE 1

Appendix A

INTEGRATED RISK ASSESSMENT FORM

Date: _____

Description of Hazard: _____

SMS File Number: _____

Assessors: _____

Evaluation of Consequences

Step 1

			Consequence Rating
1	Could there be non-compliance with regulations, policies, guidelines or other commitments?	H: Prosecutions and/or major fines M: "Tickets", violations of policies, guidelines, etc. L: No	
2	What could the impact be on the health and safety of employees, contractors and others involved in our operations?	H: May cause lost time injury or illness M: May cause minor injury or illness L: Little or no effect on health and safety	
3	What damage could be caused to company equipment or facilities?	H: May cause serious damage or destruction M: May cause minor damage L: Little or no damage	
4	What would be the environmental damage caused by this hazard?	H: Permanent Harm or irreversible damage M: Threatened harm or recoverable damage L: Insignificant damage or short term effects	
5	What is the impact on the company's image? (Would MAEi have difficulty with customers, attracting new employees, ability to do business, etc?)	H: Could lead to significant opposition M: Concerns expressed by customer, employees etc. L: Little or no impact	
6	What is the impact on costs?	H: Greater then $50,000 M: Greater then $20,000 L: Less than $20,000	

Overall rating for consequence (use your judgement based upon the above evaluations)

⦿ Catastrophic	○ Critical	○ Major	○ Minor	○ Negligible

Evaluation of Exposure

Rate the exposure level; based upon your knowledge of past experiences and future company operations. Rate how often the company is exposed to the hazard under evaluation.

○ Never	○ Hardly Ever	○ Often	⦿ Very Often	○ Continuously
Occurs once every two to three years	Occurs once per year	Occurs once per month	Occurs once or more per week	Occurs once or more per day

1 of 2

Appendix A (Continued)

INTEGRATED RISK ASSESSMENT FORM

SMS File Number: _____

Evaluation of Likelihood
Rate Prevention Systems
List Existing Prevention Systems _____

0

Determine the likelihood a hazard may cause an incident based upon the effectiveness of the prevention systems.

○ Extremely Unlikely	○ Unlikely	● Likely	○ Extremely Likely	○ Certain
highly unlikely to occur due to very effective and robust prevention systems	reduced chances of occurrence due to good prevention systems	could occur due to deficiencies in the prevention systems	likely to occur due to inadequate prevention systems.	very likely to occur due to absent prevention systems
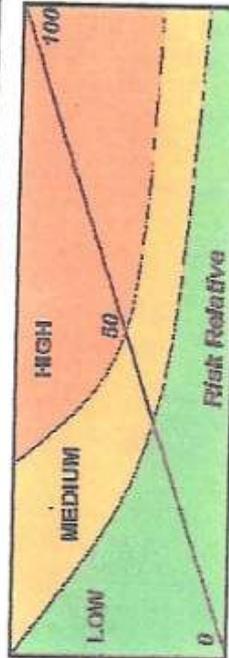
Risk Relative = ___64___

Improvement is a priority: Act this year

Date	Course Taken	Instructed By	Credit Hours	Recirtification Due
	Personnel Orientation			
8/14/2006	Site Orientation	GH	OJT	N/A
	H/R Orientation			
	Flt. Line Equip.			
	Rules & Regs.			
	Job Responsibilities			
	Cust. Serv. Counter			
	Radios & Comm.			
	City Organization Cht.			
	City Departments			
	Avi. Catagories			
	FBO Definition			
	Haz/Comm Program			
	Flt. Line Haz/Comm			
	Mechanics Of Fire			
	Flt. Line Safety			
	Fuel Trk Driving Test			
	Fuel Trk Driving Test			
	Fuel Trk Driving Test			
	Pumping Av-Fuels			
	Fuel Farm Training			
	Fire Alarm Systems			
	NATA - PLST Test # 1			
	NATA - PLST Test # 2			
	NATA - PLST Test # 3			
	NATA - PLST Test # 4			
	NATA - PLST Test # 5			
	NATA - PLST Test # 6			
	NATA - PLST Test # 7			
	NATA - PLST Test # 8			
	NATA - PLST Test # 9			
	NATA - PLST Test # 10			

Customer Service Counter

Recirtification Date: _____

Name: _____

		ASW	SASW
a.	Public Address (Paging) System	_____	_____
b.	Telephone System Operations	_____	_____
c.	Credit Card POS Machines (Airworld & Avcard)	_____	_____
d.	Services, Products and Rates	_____	_____
e.	Service Orders, On-line logs, Aircraft Activity Log.	_____	_____
f.	Renal Cars / Crew Cars	_____	_____
g.	Catering	_____	_____
h.	Hotel Reservations	_____	_____
i.	Shuttle / Limo / Towncar / Taxi Services	_____	_____
j.	Directional Maps	_____	_____
k.	Pilot Supplies / Retail Shop	_____	_____
l.	Conference Rooms (Upstairs, Down Stairs, Crosby Room)	_____	_____
m.	Pay Phone Location	_____	_____
n.	Terminal Fire Alarm Panel	_____	_____
o.	Fire Alarm Monitor Box & Printer	_____	_____
p.	Fax Machine & Copy Machine	_____	_____
q.	Computer Terminals	_____	_____
r.	Unicom Radio & Frequencies	_____	_____
s.	Security Cameras & Gate Controls	_____	_____
t.	ILS Monitor Box / ILS Alarms	_____	_____
u.	Hallway Key Box / Key Drawer	_____	_____
v.	Memo Book	_____	_____
w.	WSI Weather System (Flight Planning)	_____	_____
x.	RDU Flight Services / CLT Clearance Phones (Flight Planning)	_____	_____
y.	Pilots Lounge / Snooze Rooms	_____	_____
z.	TV's, Remote's, Direct TV (Satellite System)	_____	_____

Aviation Refueler Driving Test

Recertification Date: _____

Name: _____

Driving Test

	#8125	#8664	#8652	Trainer
a. Initial Start-up	_____	_____	_____	_____
b. Operating Controls	_____	_____	_____	_____
c. Parking Brake	_____	_____	_____	_____
d. Wheel Chocks	_____	_____	_____	_____
e. Gauges	_____	_____	_____	_____
f. Lights & Rotating Beacon	_____	_____	_____	_____
g. Automatic Shut-off Devises				
1. High Coolant Temp.	_____	_____	_____	_____
2. Low Oil Pressure	_____	_____	_____	_____
3. Low Air Pressure	_____	_____	_____	_____
h. Right of Way	_____	_____	_____	_____
i. Backing-up / Avoid at All Cost	_____	_____	_____	_____
j. Approaching Aircraft	_____	_____	_____	_____
k. Positioning Refueler @ Aircraft	_____	_____	_____	_____
l. Driving Test	_____	_____	_____	_____

Refueler – Pumping Mode

	#8125	#8664	#8652	Trainer
a. Setting the park Brake	_____	_____	_____	_____
b. Engaging PTO (pump)	_____	_____	_____	_____
c. Brake Interlock System				
1. PTO Interlock	_____	_____	_____	_____
2. Fuel Nozzle Interlock	_____	_____	_____	_____
3. Bottom Load Interlock	_____	_____	_____	_____
d. Pumping System				
1. Pump	_____	_____	_____	_____
2. Piping	_____	_____	_____	_____
3. Valves	_____	_____	_____	_____
4. Filter Vessel	_____	_____	_____	_____
5. Hose Reel	_____	_____	_____	_____
6. Nozzle Types	_____	_____	_____	_____
7. Deadman Nozzles	_____	_____	_____	_____
8. Deadman Control	_____	_____	_____	_____

9. Registers (meters) _____   _____   _____   _____
e. Static Electricity
   1. Grounding vs. Bonding ____

Flight Line Equipment

Recirtification Date: _____

Name: _____

Flight Line Equipment

		ASW	SASW
a.	Harlan & Lektro Tugs		
	1. What Is Draw Bar Pull (DBP)	_____	_____
	2. Capacity of Tugs	_____	_____
	3. Jack-Knifing	_____	_____
	4. Speed While Towing	_____	_____
	5. Wet Pavement & Towing	_____	_____
b.	Hobart – Ground Power Unit (GPU)		
	1. Purpose of a GPU	_____	_____
	2. 28 Volts vs. 14 Volts	_____	_____
	3. Plug Types	_____	_____
	4. 110 A/C Current (Location)	_____	_____
c.	Jet Refueler		
	1. Fire Extinguisher (How Many & Where)	_____	_____
	2. Emergency Shutoff (How Many & Where)	_____	_____
	3. Purpose of Internal Valve	_____	_____
	4. Hose Reel Valves	_____	_____
	5. Filter Vessel Valve	_____	_____
	6. Types of Nozzles & Costs	_____	_____
	7. Fuel System Icing Inhibitor (FSII Additive)	_____	_____
	8. Recirculation Piping	_____	_____
	9. Registers (Meters) – Whole Gallons	_____	_____
	10. Smoking	_____	_____
d.	Avgas Refueler		
	1. Fire Extinguisher (How Many & Where)	_____	_____
	2. Emergency Shutoff (How Many & Where)	_____	_____
	3. Internal Valve Actuator	_____	_____
	4. Register (Meter)	_____	_____
	5. No Tenths – Only Whole Gallons	_____	_____
e.	Tow Bars		
	1. Tronair Tow Bar Receiver	_____	_____

    2. Tronair Towheads   _____   _____
    3. Joy Bar   _____   _____
    4. Joy Bar (DBP) Capacity   _____   _____
    5. Jetstar Tow Bar   _____   _____
 f. Wands   _____   _____
 g. Electric Golf Carts   _____   _____
 h. Low Profile Lavatory Cart

Flight Line Safety

Recirtification Date: _____

Name: _____

Flight line Safety

	ASW	SASW
a. Hearing Protection		
1. Must Be Worn On Line	_____	_____
b. Eye Protection	_____	_____
c. Summer Precautions		
1. Know The Signs of Heat Exhaustion	_____	_____
2. Know The Signs of Heat Stroke	_____	_____
3. Drink Plenty of Fluids	_____	_____
4. Wear Sun-Block	_____	_____
5. Sunglasses	_____	_____
d. Winter Precautions		
1. Know The Signs of Frostbite	_____	_____
2. Layer Clothing	_____	_____
3. Gloves & Head Gear	_____	_____
e. Work Gloves	_____	_____
f. Ladders		
1. Inspected Daily	_____	_____
2. If Defective – Destroyed	_____	_____
3. No Standing on Top Rung	_____	_____
g. Helicopters		
1. Blades	_____	_____
2. Tail Rotor	_____	_____
3. Ground Effect Oscillations	_____	_____
4. More Than One Helicopter	_____	_____
h. Propellers		
1. Never Stand In The Arc	_____	_____

2. Always Turn Prop – Opposite Rotation _____ _____
3. Never Stare Into a Turning Prop _____ _____
4. Never (Hand) Prop Start Any Aircraft _____ _____
i. Chocking Wheels
    1. Propellers must be stopped turning _____ _____
    2. Jets Must Be Shut Down _____ _____

j. Pitot Tubes, Antenna, Landing Gear Doors _____ _____
k. Directing Aircraft _____ _____
l. Prop Wash & Jet Blast

TRAINING PROGRAM SCHEDULE-
Date of Hire:

1. Orientation by Airport Personnel   **Date**   **Trainee**
    Trainer

  a. **Airport Operations Manager Welcome** _____ _____ _____
      1. City of Concord Mission Statement
      2. Co-Workers Committee
      3. In-House Meetings
  b. **City ID/Time Card Badge (Human Resources)** _____ _____ _____
  c. **CDL License Confirmation - Photocopy** _____ _____ _____
  d. **Locker Assignment** _____ _____ _____
      1. Right to Search
      2. Paperwork
  e. **Employee Parking Lot** _____ _____ _____
  f. **Telephone List and AV-Number List** _____ _____ _____
  g. **Safety Equipment** _____ _____ _____
      1. Paperwork
      2. Hearing Loss
      3. Must Use Safety Equipment
  h. **Assign Radio Equipment** _____ _____ _____
      1. Conversations Recorded
      2. Other Channels
      3. Failure to Return Equipment
  i. **Uniforms** _____ _____ _____
      1. Policy
      2. Shoes
      3. Casual Friday
  j. **Airport Director Greeting** _____ _____ _____
  k. **Training Schedule** _____ _____ _____
      1. Hours of Training
      2. Safety While Training
      3. Testing

        4. 100% Score to Pass
        5. Assignment to Teams
  l. Scheduling of Road Test for CDL   _____ _____ _____
  m. Scheduling of Hepatitis B Shots   _____ _____ _____
  n. Expectations on Personal Appearance   _____ _____ _____
  o. Time Clock Operation   _____ _____ _____

2. Site Orientation

  a. Terminal Building (including Tower)   _____ _____ _____
  b. Diamond Aviation Hangar   _____ _____ _____
  c. S & D Coffee Hangar   _____ _____ _____

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(Continuation of Site Orientation)   **EMPLOYEE :** _____

                                   Date Trainee
                Trainer

  d. C.C. Dickson Hangar   _____ _____ _____
  e. Helicopter Pads   _____ _____ _____
  f. Aircraft Wash Rack   _____ _____ _____
  g. Security Gates and Cameras   _____ _____ _____
  h. Maintenance Building   _____ _____ _____
  i. Dumpster   _____ _____ _____
  j. Electrical Vault Building   _____ _____ _____
  k. Customer Parking Lot   _____ _____ _____
  l. Fire Pump Station   _____ _____ _____
  m. Airport Business Park   _____ _____ _____
  n. Hangar ≅**A**≅   _____ _____ _____
  o. Hangar ≅**A**≅ **Offices**   _____ _____ _____
  p. Fire Station #6   _____ _____ _____
  q. Spitfire Maintenance Hangar   _____ _____ _____
  r. Hangar ≅**B**≅   _____ _____ _____
  s. Hangar ≅**C**≅   _____ _____ _____
  t. Hangar "D"   _____ _____ _____
  u. Aircraft Self-Maintenance Building   _____ _____ _____
  v. T-Hangars (TA, TB, TC, TD)   _____ _____ _____
  w. Tiedowns   _____ _____ _____
  x. Taxiways   _____ _____ _____
      1. Width
      2. Designators for Taxiways (A, B, C, and D)
      3. Restricted Travel
  y. Medium Intensity Approach Lighting System   _____ _____ _____
      1. What is MALSR
      2. Visual vs. Instrument Aid

z. **Precision Approach Positioning Lights (PAPI)**   _____   _____   _____
  1. **What are PAPIs**
  2. **Location of PAPIs**
z. **Runway 02/20**   _____   _____   _____
  1. **Airport Designator (JQF)**
  2. **Length and Width**
  3. **Direction of Runways**
  4. **High Intensity Quartz Landing Lights (HIRQL)**
  5. **Tower Hours of Operations**
  6. **Control Runway Lighting Intensity**
aa. **AWOS**   _____   _____   _____
  1. **What is AWOS**
  2. **Location of AWOS**
  3. **Weather Information by Telephone or Radio**

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(Continuation of Site Orientation)   **EMPLOYEE :**

	Date	**Trainee**	**Trainer**

bb.**ILS System**   _____   _____   _____
  1. **What is ILS**
  2. **Three Instruments for ILS**
  3. **Instrument Flight Rules (IFR)**
  4. **Visual Flight Rules (VFR)**
cc. **Glide Slope**
  1. **Purpose of GS**
  2. **Location of GS**
dd. **Localizer**   _____   _____   _____
  1. **Purpose of LOC**
  2. **Location of LOC**
ee. **Distance Measuring Equipment**   _____   _____   _____
  1. **Purpose of DME**
  2. **Location of DME**

3. City of Concord Orientation (Human Resources)

a. **Video - "Concord - A City Meeting the Future"**   _____   _____   _____
b. **Benefits Information and Sign-ups**   _____   _____   _____
c. **Withholding Forms**   _____   _____   _____
d. **Issuance of the Individual Personnel Policy Handbook - Book # _____**   _____   _____   _____

4. Rules and Regulations

a. 1. Safety First   _____ _____ _____
b. 2. The Unbreakable Rule : Don't Know - Don't Do   _____ _____ _____
c. 3. 100% Rule   _____ _____ _____
d. 4. No Paperwork – No Work   _____ _____ _____
e. Training Videos   _____ _____ _____
f. Reading of City's Personnel Policy   _____ _____ _____

5. Flight Line Equipment
(Must Pass Ground Vehicle Operations Test Before you Can Operate Any Equipment)

a. **Harlan Tugs**   _____ _____ _____
    1. What is Drawbar Pull (DBP)
    2. Capacity of Tug
    3. Jack-knifing
    4. Speed

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(Continuation of Flight Line Equpment)   **EMPLOYEE :**

	Date	Trainee	Trainer

b. **Hobart Brothers Ground Power Unit (GPU)**   _____ _____ _____
    1. Purpose of a GPUs
    2. 28 Volts vs. 14 Volts
    3. Plug Types
    4. 110 AC Voltage (Household Current)
c. **Jet Refueler**   _____ _____ _____
    1. Fire Extinguishers – How Many and Where
    2. Emergency Shutoff – How Many and Where
    3. Purpose of Internal Valve
    4. Hose Reel Valve
    5. Filter Vessel Valve
    6. Types of Nozzles and Cost
    7. Fuel System Icing Inhibitor (FSII Additive)
    8. Recirculation Pipe
    9. Register (Meters) – Whole Gallons
    10. Smoking
d. **Avgas Refueler**   _____ _____ _____
    1. Fire Extinguishers – How Many and Where

        2. **Emergency Shutoff – How Many and Where**
        3. **Internal Valve Actuator**
        4. **Register (Meter)**
        5. **No Tenth Only Whole Gallons**
   e. **Towbars** _____ _____ _____
        1. **Tronair Towbar Receiver**
        2. **Tronair Towheads**
        3. **Joy Bar**
        4. **JetStar Towbar**
   f. **Wands** _____ _____ _____
   g. **Golf Carts** _____ _____ _____
   h. **Low-Profile Lavatory Cart** _____ _____ _____
   i. **Low-Profile Pottable Water Cart** _____ _____ _____
   j. **Helicopter Dollies**
        1. **Number and Location** _____ _____ _____
        2. **Sizes**
   k. **Towable Baggage Carts** _____ _____ _____
   l. **Terminal Building Valet Carts** _____ _____ _____
   m. **Aircraft Chocks** _____ _____ _____
        1. **Wooden Chocks**
        2. **Large Aircraft Rubber Chocks**
        3. **Main Wheel vs. Nose Wheel Chocking**

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(Continuation of Flight Line Equipment)   **EMPLOYEE :**

                                  Date   **Trainee**   **Trainer**

        4. **Leave Space to Remove**
        5. **Turning Props and Chocking**
        6. **Removing Chocks While Aircraft is Running**

   n. **Lektro Electric Tug** _____ _____ _____
        1. **Harlan Tug vs. Lektro**
        2. **GPU**
        3. **Large Lektro Tug**
        4.
6. ASW I : Job Responsibilities

   a. **Five Areas of Responsibility** _____ _____ _____
        1. **Vehicle and Equipment Maintenance**
        2. **Building Maintenance**
        3. **Airfield/Runway Maintenance**

       4. **Landscaping Maintenance**

       5. **Aircraft Service**

  b. **Fire/Rescue Responsibilities** _____ _____ _____

       1. **Fire Station #6**

       2. **Blood Borne Pathogens**

  c. **Security Requirements** _____ _____ _____

       1. **Detaining Individuals**

       2. **Gates**

       3. **Night Inspections**

  h. **Shop Work** _____ _____ _____

       1. **Learning to Use the Equipment**

       2. **Wear Safety Equipment**

       3. **Lock Out/Tag Out**

  i. **Fuel Farm Maintenance** _____ _____ _____

       1. **Filter Changes**

       2. **Proper Tools**

       3. **Safety Issues**

  j. **Quality Control** _____ _____ _____

  k. **Customer Service Counter** _____ _____ _____

  l. **Performance Evaluation Paperwork** _____ _____ _____

       1. **Copy of Paperwork**

       2. **Length of Probation**

       3. **Who is Involved in the Evaluation**

       4. **Performance Progress Notes**

       5. **Written and Verbal Warnings**

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(Continuation of Job Responsibilities)   **EMPLOYEE :**

	Date	**Trainee**	**Trainer**
7. Customer Service			
a. **Public Address System**	_____	_____	_____
b. **Telephones**	_____	_____	_____
c. **Cash Register**	_____	_____	_____
d. **Services, Products and Rates**	_____	_____	_____
e. **Credit Cards and POS Machine**	_____	_____	_____
f. **Service Orders - Fuel**	_____	_____	_____
g. **Rent-A-Cars**	_____	_____	_____
h. **Catering**	_____	_____	_____
i. **Hotel Reservations**	_____	_____	_____
j. **Taxi Service**	_____	_____	_____

k. **Limo Service**   _____ _____ _____
l. **Directional Maps**   _____ _____ _____
m. **Retail Shop - Pilot Supplies**   _____ _____ _____
n. **Downstairs Conference Room**   _____ _____ _____
o. **Lobby House Telephone**   _____ _____ _____
p. **Terminal Fire Alarm Panel**   _____ _____ _____
q. **Remote Fire Alarm Monitor Box and Printer**   _____ _____ _____
r. **Fax Machine**   _____ _____ _____
s. **Computer Terminal**   _____ _____ _____
t. **Copy Machine**   _____ _____ _____
u. **Aircraft On-Line and Activity Logs**   _____ _____ _____
v. **AWOS Terminal**   _____ _____ _____
w. **Security Camera and Gate Controls**   _____ _____ _____
y. **ILS Monitor Boxes**   _____ _____ _____
z. **Outside Vendors and Solicitations**   _____ _____ _____
aa. **Key Box**   _____ _____ _____
bb. **Memo Book**   _____ _____ _____
cc. **WSI - Weather Radar (Flight Planning)**   _____ _____ _____
dd. **Flight Service Phone (Flight Planning)**   _____ _____ _____
ee. **Pilot's Lounge**   _____ _____ _____
ff. **Snooze Rooms**   _____ _____ _____
gg. **TV, Remote Control and PrimeStar**   _____ _____ _____

8. Radios and Communication

a. **Phraseology**   _____ _____ _____
b. **Unicom**   _____ _____ _____
c. **Motorola 800 Radio**   _____ _____ _____
d. **ICOM Air to Air Radios**   _____ _____ _____
e. **Batteries and Chargers**   _____ _____ _____

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(Continuation of Radio and Communication)   **EMPLOYEE :**

	Date	Trainee	Trainer

9. ILS Training Video - Lesson #1
a. **Review Test Results**   _____ _____ _____
b. **Discussion and Questions**   _____ _____ _____
c. **On-The-Job Training**   _____ _____ _____

10. Commercial Driver's License

a. **Scheduling of Training for CDL Road Test**   _____ _____ _____

Date : _____   Time : _____
  b.   **Road Test**
Date : _____   Time : _____   _____ _____ _____

11. On-The-Job Training with Flight Line Crews   _____ _____ _____

12. Organizational Chart   _____ _____ _____

a. **Board of Alderman**	h. **Marketing**
b. **City Manager**	i. **CSR I**
c. **Department Heads**	j. **CSR II**
d. **Aviation Director**	k. **ASW I**
e. **Assistant Aviation Director**	l. **ASW II**
f. **Account Clerk**	m. **Courier**
g. **Administrative Assistant**	

13. City Departments   _____ _____ _____

  a. **Fleet Services/Public Works**
  b. **Electric Department**
  c. **Human Resources**
  d. **Engineering & Water Resources**
  e. **Zoning and Planning**
  f. **Fire Department**
  g. **Police Department**

14. PLST Training Video #1 - Introduction

  a. **Review Test Results**   _____ _____ _____
  b. **Discussion and Questions**   _____ _____ _____
  c. **On-The-Job Training**   _____ _____ _____

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EMPLOYEE :

Date   Trainee   Trainer

15. Aviation Categories _____ _____ _____

   a. **Commercial Passenger Service**
   b. **Commercial Air Cargo Service**
   c. **Commercial Air Taxi Service**
   d. **Military Aviation**
   e. **General Aviation**
     1. **Commercial Charter and Air Freight**
     2. **Flight Training**
     3. **Business Aircraft**
     4. **Private Aircraft**
     5. **Air Ambulance**

16. Concord Regional Airport _____ _____ _____

   a. **General Aviation Reliever Airport**
   b. **FAA Funding of the Airport**
   c. **City of Concord Funding of the Airport**
   d. **Uncontrolled Field - "See and Be Seen"**
   e. **Control Tower - Special Events**

17. Fixed Based Operator _____ _____ _____

a. **Full Service FBO**
1. **Line Services**
2. **Maintenance**
3. **Avionics**
4. **Aircraft Charter**
5. **Aircraft Parts**
6. **Aircraft Sales**
7. **Flight Training**
8. **Airline Fueling HIC)**
9. **Military Fueling**
10. **Aircraft Cleaning**
11. **Aircraft Deicing**
12. **Pilot Shop**
13. **Catering**
14. **Rent-A-Car**

b. **Services We Provide**
1. **Line Services**
2. **Fuel Additives (Prist)**
3. **Aviation Oils**
4. **Towing**
5. **Ground Power**
6. **Baggage Handling**
7. **Pottable Water**
8. **Aircraft Storage (T-Hangars and**
9. **Self-Maintenance**
10. **Wash Rack**
11. **Pilot Shop**
12. **Catering**
13. **Rent-A-Car**
14. **Airport Operations**

EMPLOYEE :

	Date	Trainee	Trainer
18. Hazard Communication Program			
a. **Written Hazard Communication Program**	_____	_____	_____
b. **Employee's "Right to Know" Law**	_____	_____	_____
c. **Product Labels and Material Safety Data Sheets**	_____	_____	_____
d. **Handling Hazard Materials Using Protective Equip.**	_____	_____	_____
e. **Cleanup of Spills and Disposal**	_____	_____	_____
f. **Exposure and First Aid Procedures**	_____	_____	_____
g. **Fire and Explosion**	_____	_____	_____
19. Flight Line Products - Haz Communication			
a. **Jet A Fuel**	_____	_____	_____
b. **Avgas 100LL**	_____	_____	_____
c. **Mogas (Unleaded Gasoline)**	_____	_____	_____
d. **Petroleum Based Aviation Oils**	_____	_____	_____
e. **Synthetic/Petroleum Based Aviation Oils**	_____	_____	_____
f. **Synthetic Aviation Turbine Oils**	_____	_____	_____
g. **Prist - Fuel Additive**	_____	_____	_____
20. Mechanics of Fire			
a. **Fire Triangle**	_____	_____	_____
b. **Fuel Vapors**	_____	_____	_____
c. **Fire Extinguishers**	_____	_____	_____
d. **Fire Station # 6**			
21. Flight Line Safety			
a. **Hearing Protectors**	_____	_____	_____
b. **Eye Protection**	_____	_____	_____
c. **Summer Precautions**	_____	_____	_____
d. **Winter Precautions**	_____	_____	_____
e. **Gloves**	_____	_____	_____
f. **Ladders**	_____	_____	_____
g. **Propellers**	_____	_____	_____
h. **Helicopter**			
1. **Blades**	_____	_____	_____
2. **Tail Rotor**	_____	_____	_____

3. Ground Effect Oscillations   _____ _____ _____

4. More Than One Helicopter   _____ _____ _____

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(Continuation of Flight Line Safety)   **EMPLOYEE :**

	Date	Trainee	Trainer
i. Chocking Wheels	_____	_____	_____
j. Pitot Tubes, Antenna, and Landing Gear Doors	_____	_____	_____
k. Directing Aircraft	_____	_____	_____
l. Prop Wash and Jet Blast	_____	_____	_____
m. Backing Vehicles	_____	_____	_____
n. Night Operations	_____	_____	_____
o. Night Reflective Vest	_____	_____	_____
p. Wands	_____	_____	_____
q. Thunderstorms	_____	_____	_____
r. High Winds	_____	_____	_____
s. Wet Pavement	_____	_____	_____
t. Fuel Spills	_____	_____	_____
u. First Aid Kits	_____	_____	_____
v. Refueler Eye Wash Kits	_____	_____	_____
w. Burn Kits	_____	_____	_____
x. Back Injuries and the Back Support	_____	_____	_____
y. Golf Cart Operations			
1. Body, Hands & Feet Inside Cart at all times	_____	_____	_____
2. Policy and Procedures reviewed	_____	_____	_____
3. Must pass Ground Veh. Ops test to operate	_____	_____	_____

22. Aviation Refueler - Driving Test   #8125 #8664 #8652

a. Initial Start-up	_____ _____ _____ _____ _____ _____
b. Operating Controls	_____ _____ _____ _____ _____ _____
c. Parking Brake	_____ _____ _____ _____ _____ _____
d. Wheel Chocks	_____ _____ _____ _____ _____ _____
e. Gauges	_____ _____ _____ _____ _____ _____
f. Lights and Rotating Beacon	_____ _____ _____ _____ _____ _____
g. Automatic Shut-Off Devices	
1. High Coolant Temperature	_____ _____ _____ _____ _____ _____
2. Low Oil Pressure	_____ _____ _____ _____ _____ _____
3. Low Air Pressure	_____ _____ _____ _____ _____ _____
h. Right of Way	_____ _____ _____ _____ _____ _____

i.   **Backing Up - Avoid at all Cost** _____ _____ _____ _____   _____ _____
j.   **Approaching Aircraft** _____ _____ _____ _____   _____ _____
k.   **Positioning Refueler at A/C** _____ _____ _____ _____   _____ _____
l.   **Driving Test** _____ _____ _____ _____   _____ _____

23. Aviation Refueler – Pump Mode   #8125 #8664 #8652

a.   **Setting Park Brake** _____ _____ _____ _____   _____ _____
b.   **Engaging PTO (Pump)** _____ _____ _____ _____   _____ _____

(Continuation of Aviation Refueler-Pump Mode)   **EMPLOYEE :**

	#8703 #8706 #8157	**Date**	**Trainee**	**Trainer**

c.   **Brake Interlock System**
    1. **PTO Interlock** _____ _____ _____ _____   _____ _____
    2. **Fuel Nozzle Interlock** _____ _____ _____ _____   _____ _____
    3. **Bottom Load Interlock** _____ _____ _____ _____   _____ _____
c.   **Static Electricity-Ground/Bond**_____ _____ _____ _____   _____ _____
e.   **Pumping System**
    1. **Pump** _____ _____ _____ _____   _____ _____
    2. **Piping** _____ _____ _____ _____   _____ _____
    3. **Valves** _____ _____ _____ _____   _____ _____
    4. **Filter Vessel** _____ _____ _____ _____   _____ _____
    5. **Hose Reel** _____ _____ _____ _____   _____ _____
    6. **Nozzle Types** _____ _____ _____ _____   _____ _____
    7. **Deadman Nozzles** _____ _____ _____ _____   _____ _____
    8. **Deadman Control** _____ _____ _____ _____   _____ _____
    9. **Registers (Meters)** _____ _____ _____ _____   _____ _____
f.   **Gauges**
    1. **Nozzle Pressure** _____ _____ _____ _____   _____ _____
    2. **Differential Pressure** _____ _____ _____ _____   _____ _____
g.   **Bypass Valve** _____ _____ _____ _____   _____ _____
h.   **Additive Pump System** _____ _____ _____   _____ _____
l.   **Emergency Shut-Off Controls** _____ _____ _____ _____   _____ _____
j.   **Water Defense Shut-Down** _____ _____ _____ _____   _____ _____
k.   **Disengaging Pump System** _____ _____ _____ _____   _____ _____
l.   **Paperwork** _____ _____ _____ _____   _____ _____
m. **Post-Fueling Inspection** _____ _____ _____ _____   _____ _____

n. **Driving Away from Aircraft** _____ _____ _____ _____ _____ _____

o. **Parking Refueler** _____ _____ _____ _____ _____ _____

24. Fuel Farm Training

a. **Fuel Master System (Manual vs Automatic)** _____ _____ _____
b. **PIN Numbers - Confidential** _____ _____ _____
c. **EMCO-Wheaton EEOC Tank Monitor System** _____ _____ _____
d. **Oil/Water Separator** _____ _____ _____
e. **Dike Drainage Area and Valve** _____ _____ _____
f. **Floating Suction** _____ _____ _____
g. **Emergency Shut-Off Buttons** _____ _____ _____
h. **Filter Vessel Sump** _____ _____ _____
i. **Fencing and Locks** _____ _____ _____
j. **Product Slop Tanks** _____ _____ _____

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(Continuation of Fuel Farm Training)   **EMPLOYEE :**

	Date	Trainee	Trainer

k. **Deadman Controls** _____ _____ _____
l. **Overfill Protection Alarms and Lights** _____ _____ _____
m. **Avgas Tank #3 System**
    1. **Piping and Valves** _____ _____ _____
    2. **Grounding and Bonding** _____ _____ _____
    4. **Product Receipt Procedures and Paperwork** _____ _____ _____
    6. **Recirculation Procedures and Paperwork** _____ _____ _____
    7. **Vapor Recovery System** _____ _____ _____
    8. **Daily Quality Control Procedures** _____ _____ _____
n. **Jet Tanks #1 and #2**
    1. **Piping and Valves** _____ _____ _____
    2. **Grounding and Bonding** _____ _____ _____
    3. **Manual vs. Automatic** _____ _____ _____
    4. **Product Receipt Procedures and Paperwork** _____ _____ _____
    5. **Refueler Reloading Procedures and Paperwork** _____ _____ _____
    6. **Recirculation Procedures and Paperwork** _____ _____ _____
    7. **Daily Quality Control Procedures** _____ _____ _____
o. **Mogas Tank #4**
    1. **Piping and Valves** _____ _____ _____
    2. **Product Receipt Procedures and Paperwork** _____ _____ _____
    3. **Refueling Vehicles/Equipment Procedures** _____ _____ _____
    4. **PROKEEs (Programmable Keys)** _____ _____ _____

5. Odometer vs. Hour Meter _____ _____ _____
6 Paperwork _____ _____ _____

25. Airport Fire Alarm Control System

  a. **Terminal Building Fire Alarm Control System** _____ _____ _____
  b. **Fire Alarm Control Box for Out Building**
     1. Zone Codes _____ _____ _____
     2. Address Codes _____ _____ _____
     3. Pump House Codes _____ _____ _____
     4. Pump "RUNNING" Procedures _____ _____ _____
     5. Acknowledgment Procedures _____ _____ _____
     6. Printer _____ _____ _____
     7. Calling 911 _____ _____ _____
  c. **Hangar "A" Fire Control System**
     1. Fire Alarm Box _____ _____ _____
     2. Dry vs Wet Sprinkler System _____ _____ _____
     3. Sprinkler Header Room _____ _____ _____
     4. Control Valves _____ _____ _____

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(Continuation of Fire Alarm Control System) **EMPLOYEE :**

	Date	Trainee	Trainer
5. Tamper Switches	___	___	___
6. Air Compressor	___	___	___
7. Hangar Beam Sensor Detectors	___	___	___
d. Hangar "B" Fire Control System	___	___	___
e. Spitfire Aviation Hangar Fire Control System	___	___	___
f. T-Hangars "TA", "TB", "TC", and "TD"			
1. Fire Header Room and Local Fire Alarm Boxes	___	___	___
2. Dry System Operation	___	___	___
3. Air Pressure Gauges and Air Compressor Pump	___	___	___
4. Air Leaks and Drip Barrels	___	___	___
5. Low Water Pressure Gauge	___	___	___
6. Air Pressure Reading vs Water Pressure Reading	___	___	___
7. TRIPPED System - Reset	___	___	___
8. Water Shut-Off and Draining the System	___	___	___
9. Winter Precautions - Freezing	___	___	___