



From Dryden to Bill C-7 Legacy and insight



Presented by

Capt Donald L Van Dyke, FRAeS

June 12, 2008

to



System Safety Society
Eastern Canada Chapter
RCAF Officers' Mess, Ottawa, Ontario

Dryden Commission of Inquiry Judicial roles in Canadian aviation safety Internationalizing Dryden's outcomes



Accident overview

March 10, 1989



Fokker F-28 Mk 1000 Reg. C-FONF



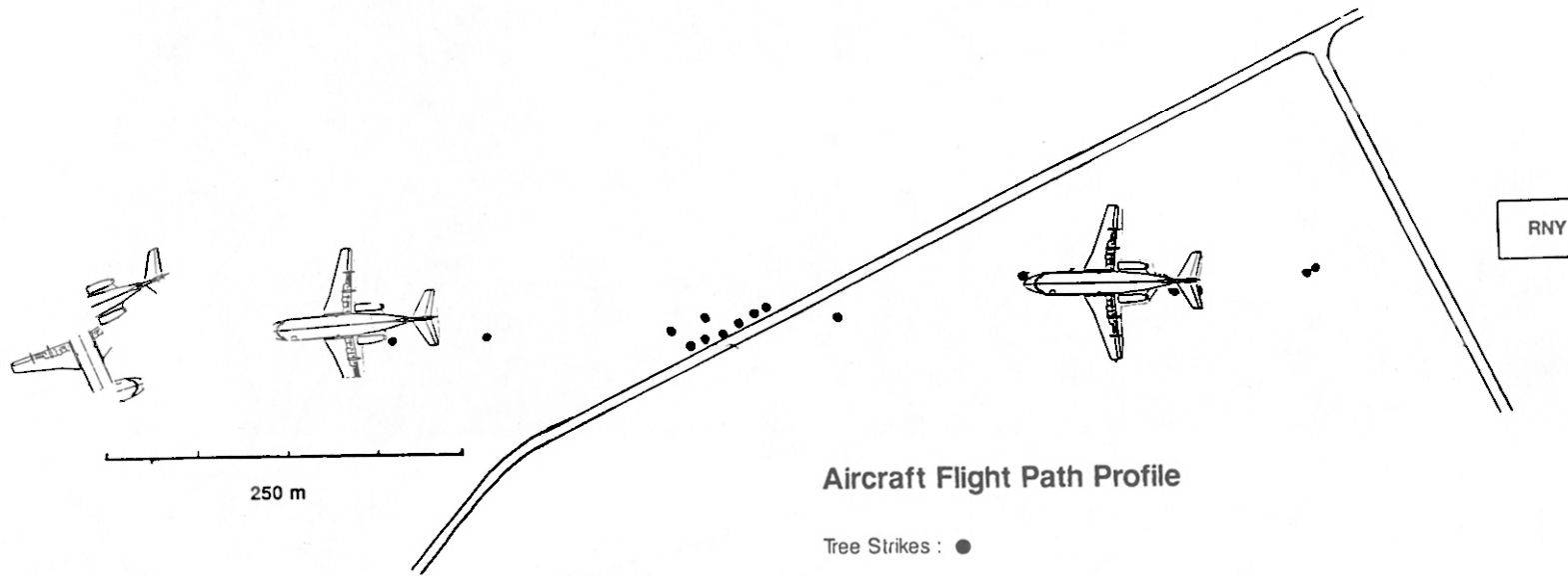
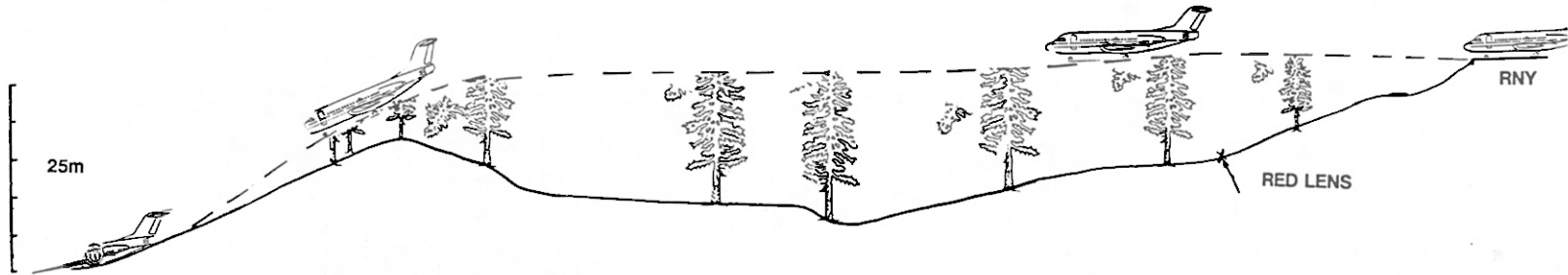
Accident overview



- Crashed on take-off due icing
- Fatalities: 3 crew/21 passengers



Accident overview

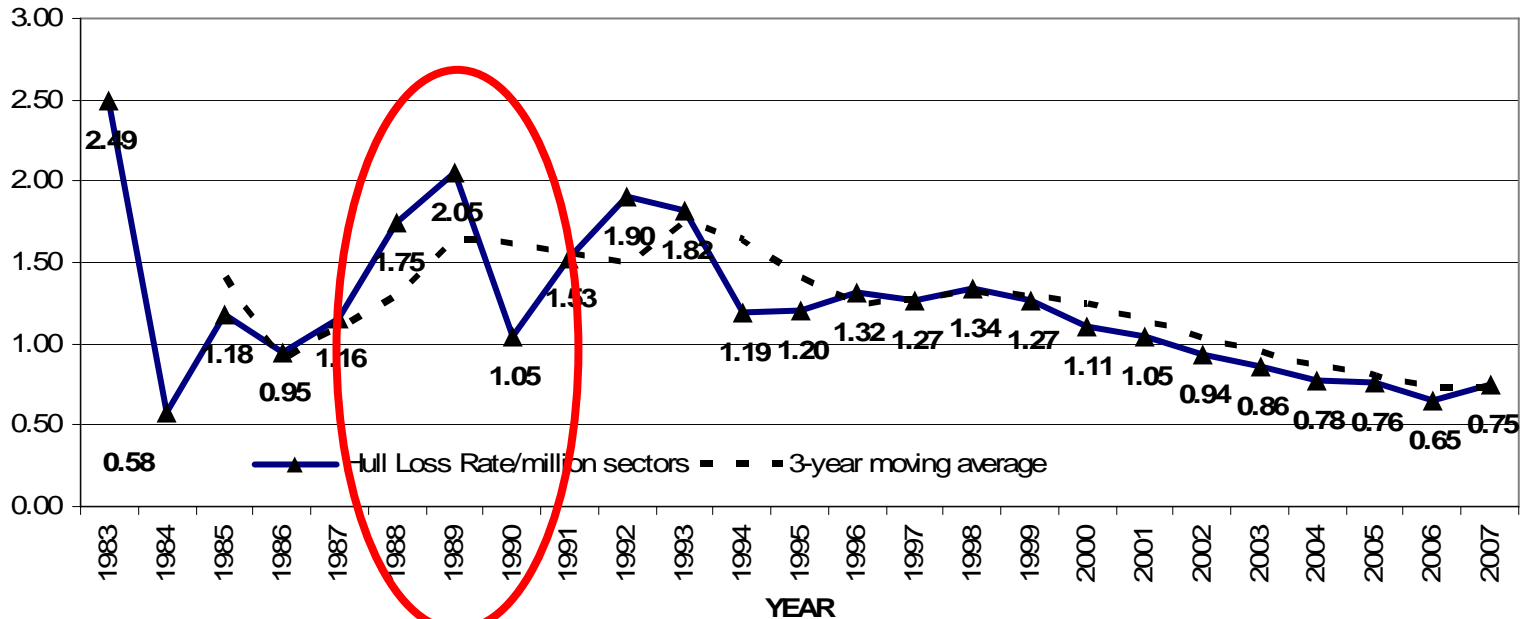
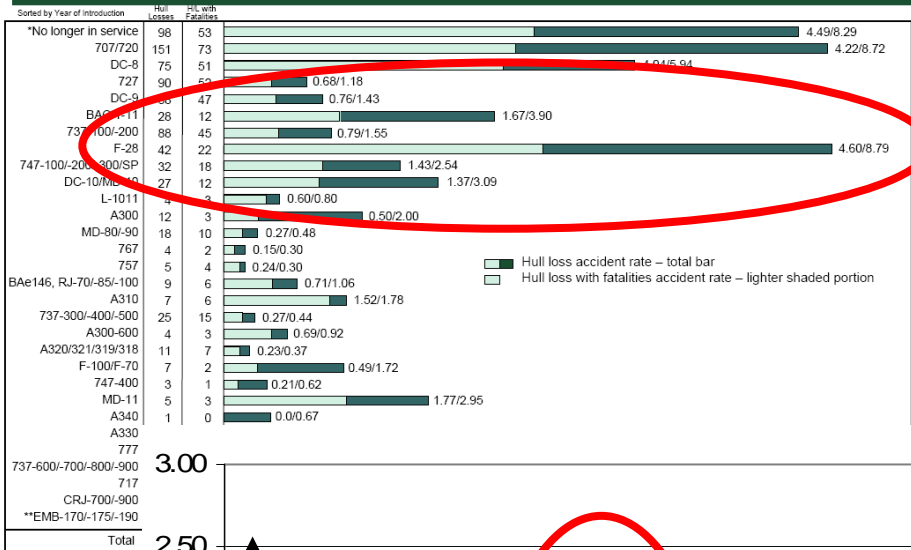


Accident overview

Accident Rates by Airplane Type

Hull Loss Accidents

Worldwide Commercial Jet Fleet – 1959 Through 2006



20
2006 STATISTICAL SUMMARY, JU

Dryden Commission of Inquiry

Demise of CASB

Canadian Aviation Safety Board (CASB)

- Mandated to ascertain probable cause
- Mishandled Arrow Air DC-8 crash at Gander
- Methods more than just questionable
- Halted in favour of Commission of Inquiry



Dryden Commission of Inquiry

New accident investigation philosophy

Prevailing philosophy

- Pilot error
- Probable cause
- Generic culpability

New philosophy

- Other probable cause
- Contributory factors
- Attributed culpability



The Honourable Virgil P. Moshansky, C.M., Q.C., FRAeS
Justice of the Court of Queen's Bench of Alberta (Ret.)

Dryden Commission of Inquiry

Establishing credibility

- Independence and dignity
- Transparency
- Freedom from constraint or influence



Dryden Commission of Inquiry

Challenges to the Commission

Attempts to influence

- Sheltering evidence
- Invoking state secret provisions
- Limiting scope of findings
- Denying access to witnesses
- Questioning competence
- Trivializing recommendations

Pilot error

- Flawed decision to attempt take-off

Systemic failures

- Inadequate aviation legislation
- Inappropriate financial emphasis
- Insufficient human resources
- Inadequate regulatory oversight

Dryden Commission of Inquiry

Recommendations

Final Report

- Made 191 major recommendations

Selected outcomes

- New Aeronautics Act and Canadian Aviation Regulations (CARs)
- *Hot refuelling* prohibited
- *Clean wing concept* regulated
- De-/anti-icing processes enhanced
- Human factors training mandated

Dryden Commission of Inquiry

Dryden Commission Implementation Project

- 12 Task Groups formed to implement recommendations
- Task Groups later converted into Canadian Aviation Regulatory Advisory Council (CARAC)



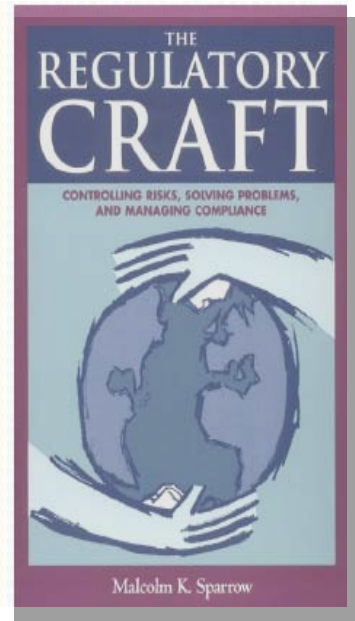
Judicial roles in aviation safety

Unresolved issues

- Oversight
- Confidentiality and secrecy
- Causality
- Regulation and promotion

Unresolved issues

The search for answers



Brookings Institution

- Social regulation strives to abate or control risks to society
- Regulator is responsible for the delivery of obligations, not just services

Access to safety information

Needs Balance



Protect safety information

ICAO

Proper administration of justice

Enable people to participate
more effectively in governing the
State

Australia

Make persons and bodies
responsible for government more
accountable to the public

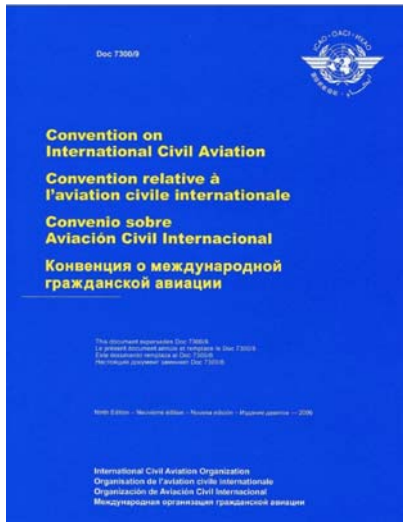
Encourage reporting of safety
concerns without self-
incrimination

Canada

To use information possessed
by the Minister

Protection of safety information

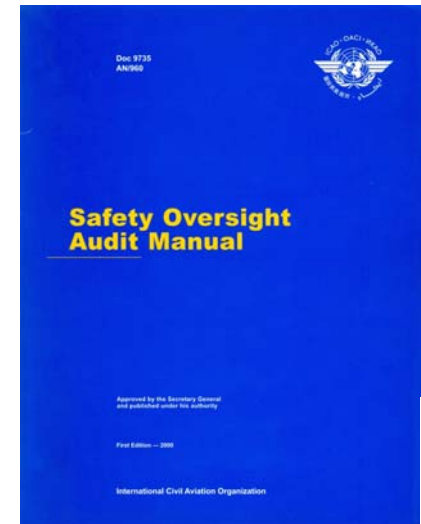
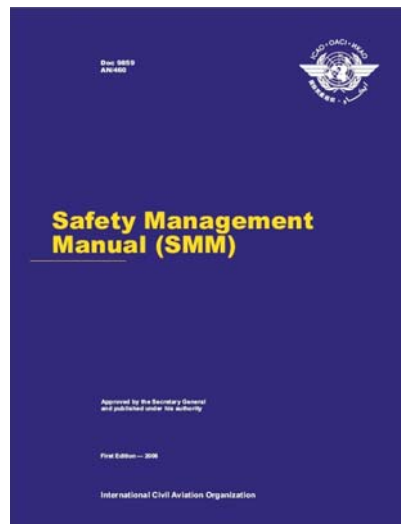
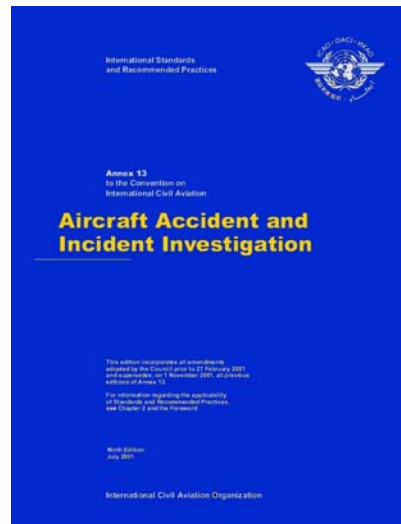
ICAO



**Chicago
Convention**

Art. 37

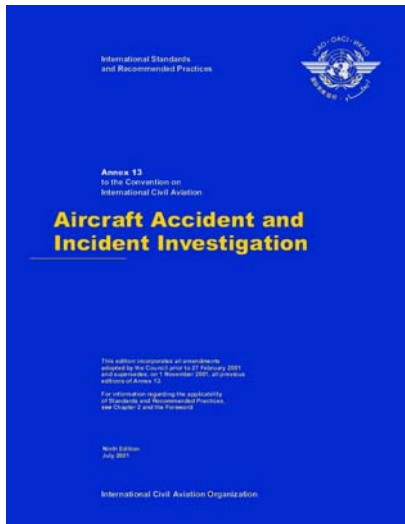
Art.44



Art 37 Adoption of international standards and procedures
Art 44 Safe and orderly growth

Protection of safety information

ICAO



WHAT IS PROTECTED?

Ann 13 Para 5.12 Non-disclosure of records

- Statements
- Communications between involved persons
- Medical and private information
- CVRs and transcripts
- Analytical opinions

Ann 13 Para 8.3 Incident reporting systems

- Voluntary incident reporting systems

Ann 13 Attach. E Legal guidance

- Safety Data Collection & Processing Systems

Ann 6 para 3.2.4 Accident prevention and flight safety programme

Flight data analysis programmes

PROTECTED AGAINST WHAT?

- Admissibility in judicial proceedings
- Inappropriate use

Accountability and responsibility

C-7§4.2 (1) and §4.9.c.1(i)(B)

Minister

- Develop and regulate aeronautics (§4.2 (1))
- Supervise all matters connected with aeronautics

Executive (of a Canadian aviation document holder)

- Be accountable for extent to which requirements have been met



Access to information

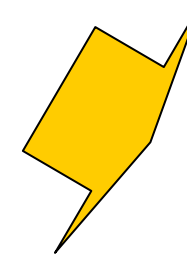
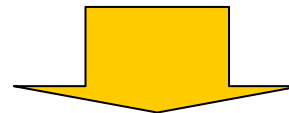
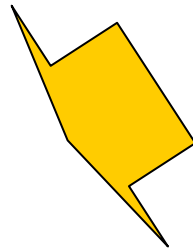
C-7§5.392 (1)

Access to Information Act
Loi sur l'accès à l'information

NOTE:
Les versions en français et en anglais de la Loi sur l'accès à l'information ont été publiées en même temps.
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Ce document est un document de travail et n'est pas destiné à être utilisé comme référence.
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In a de-identified form



Transport
Canada

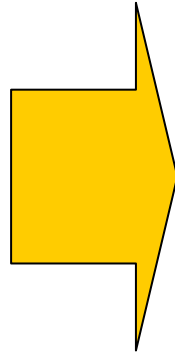
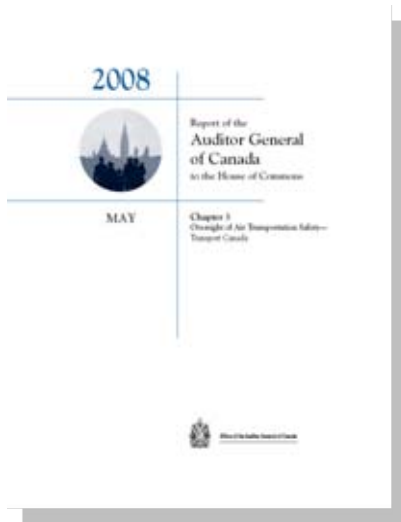
Transports
Canada

At discretion of Minister

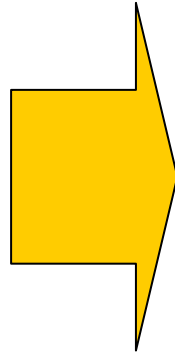


To a court or similar body

Vulnerabilities of change



- Lack of precedents
- No risk assessment performed
- No fail-safe protocol(s) established
- Insufficient provision for review of oversight performance



- Inappropriate sealing of information
- Inadequate provision for needed culture change
- Comprehensive aviation safety whistleblower protection needed

Whistleblower protection

C-7§5.392 (3) and (4)

(In)famous aerospace whistleblowers

Roger Boisjoly: Rogers Commission on Challenger

**Bobby Boutris/Douglas Peters (FAA):
Congressional hearings on Southwest Airlines**

Judicial roles in aviation safety

Effectiveness of the Judiciary

- Vested power
- Freedom and independence
- Authority to:
 - Order and subpoena
 - Compel testimony under oath
 - Hold witnesses in contempt
 - Open hearings to the public
 - Facilitate cross-examination under oath

Judicial roles in aviation safety

Dryden precursors resurrected

- Adverse economic conditions
- Diminished regulatory oversight
- Inadequate aviation legislation
 - Reduced redundancy
 - Squandered resources
 - False premises
 - Abdicated regulatory responsibilities
 - Insufficient whistleblower protection
 - Unrealistic implementation schedule
 - Reliance on biased reporting

Judicial roles in aviation safety

Oversight and safety performance linked

- Lack of regulatory oversight a causal influence in numerous accidents
- Economic pressures can lead to white-collar crime and violations of regulations
- Inadequate legislation fails to avoid subverted innovation and technology
- Linkage recognized by industry itself

Judicial roles in aviation safety

Conclusions regarding Canadian aviation safety

Judiciary must

- Hold system accountable to public
- Respond to public need for assurance
- Periodically check organizational vital signs

Commission of Inquiry

- Urgently needed
- Parliamentary action needed to enable periodic judicial review

Internationalizing Dryden

The State and aviation system safety

Principle of *jus cogens*

- Norms from which no derogation is permitted

State responsibilities

- Ensure safety through regulatory oversight
- Especially incumbent on States with major aviation industries

Internationalizing Dryden

The regulator and aviation system safety

Regulator responsibilities

- Give primacy to safety of air navigation
- Conduct comprehensive surveillance
- Monitor/improve safety system performance
- Implement international enhancements

Delegations and authorities

- Regulator remains accountable
- Excessive delegation leads to de-skilling

Internationalizing Dryden

The judiciary and aviation system safety

Possible judicial responsibilities:

- Periodically evaluate safety system
- Provide expert view of national needs

Requisites to act:

- Currently at the behest of the State
- Usually only when system is broken
- Participation needs to be institutionalized

Internationalizing Dryden

Public international law and aviation system safety

Chicago Convention and Annexes:

- Enforceability limited
- Certain States have:
 - Insufficient resources and poor oversight
 - No or inadequate national regulations
 - Minimal commitment to aviation concerns
- States to faithfully implement SARPs
 - Judiciary evaluates fidelity of implementation

Conclusions

Judicial review

- Process to be institutionalized
- SARPs needed to internationalize concept

Commissions of Inquiry

- Headed by superior court judge
- Conducts periodic judicial review
- Evaluates national aviation safety
- Reports findings to State and ICAO

From Dryden to Bill C-7

Legacy and insight



QUESTIONS