

WHO GUARDS THE PUBLIC INTEREST IN CIVIL AVIATION SAFETY?

ABSTRACT

This article seeks to define 'public interest' in safety in Australian civil aviation. It focuses on governance. Reforms from 1982 were underpinned by fiscal cost-consciousness and argument over whether the public, fare-paying passengers or industry were the clients. They lacked a sound theory: the neo-liberal theory of bureaucratic failure and the new managerialist policy of fiscal efficiency have been inadequate to explain how to arrange the residual regulatory affairs. Executive boards were established as statutory bodies to exercise sovereign coercive power but this fractured accountability. Governance now is organisationally more complex and system coherence has suffered. Managerial competence was a major contributing factor.

Critics claim that the number of near misses indicates that the system is an 'accident waiting to happen'; supporters claim that the low numbers of accidents shows that the regime is working satisfactorily despite cutting \$A100 million per year of 'padding' from previous budgets.

INTRODUCTION

This article seeks to define the 'public interest' in safety in Australian civil aviation. It was presumed that this quest would be relatively straight forward because presumably there is an unambiguous measure of effectiveness of public policy: the frequency and severity of accidents. Aviation safety is contentious in the means to achieve it, but not in its broad objective. Without a widely accepted delineation between public and private interest, every person and every action can be labelled as self-interested; and the silent community's multi-faceted stake may be forgotten.

The study sheds light on the 'new managerialist' reforms of the 1980s and 1990s to the public sector, a process that can be said to have been triggered in aviation by economic deregulation in the USA from 1978. In Australia the underpinning program has been called 'economic rationalism', an agenda of deregulation and commercialisation, deriving from neo-liberal philosophy.

It is fairly easy to compile a normative standard of public interest in broad conceptual terms. Professor John Kane's personal suggestion is quite serviceable: "Public interest is the best safety achievable with the resources available". However, the words "best", "achievable" and "available" are variables and this article explores their meaning.

Reorganisation of Aviation Safety in Australia

There is a large literature tracing the origins of the neo-liberal ascendancy in Australia (e.g. Davies, 2004). Here, it is sufficient to note that pro-competitive deregulation in aviation was nested within a cross-jurisdictional agenda (BTE, 1985), so aviation could not have avoided scrutiny by the economic rationalists emergent in the national capital, Canberra after the election of a Labor government in 1983. Stated simply, the old regime had run its course. Canberra viewed aviation as an industry that had come of age and could well afford to pay its way including pay for its regulation: "Rationalist governments became sick of subsidising an industry that was making profits" (John Wanna, pers. comm.).

While no parties have demanded deregulation of *safety* in the same way as deregulation of *economic* restrictions, reformers of safety in the 1980s and 1990s also drew upon the discourse of government failure and union feather-bedding. Reformers argued for restructuring to separate 'pure' regulatory functions from those that could be commercialised. Their cause was greatly advanced by two notorious accidents in 1993 and 1994.

METHODS

The study was conducted by literature search and interview. Aviation safety in Australia has been the subject of several parliamentary inquiries and all notable accidents are subject of official reports. I conducted some 29 interviews face to face, mostly between 1999 and 2002. Interviewees were selected from two former ministers, the current Minister's office, the three statutory authorities and their parent federal Department of Transport, academics, airlines, journalists, commentators and other interested parties. Some selected themselves; some were approached on the basis of public comments or advice from earlier respondents.

The study is an historic one. Although it mentions the 2008 Issues Paper and Green Paper, it has not systematically examined circumstances within the public bureaux after 2003.

Australia is no small player in international aviation, administering some 11% of the world's surface. It is one of the big five (with USA, Europe, UK and Canada). Its institutional reforms are watched closely, world wide.

Australia is governed under a parliamentary system, in which the Prime Minister commands both the parliamentary party and the executive government, a system more conducive to formulating coherent policy than in presidential systems such as the USA's, in which accountability is dispersed. The minister combines the legislative role as a member of Parliament with executive responsibility for the department. The departmental secretary is traditionally a career bureaucrat.

CHRONOLOGY OF REFORM

24 Nov. 1938. Department of Civil Aviation created, incorporated into Department of Transport in 1973. Reconstituted as Department of Aviation from 1982-1987. There have been several departmental restructures since then. This section includes a brief summary of the other major institutional changes and events since 1982.

1984. Renowned adventurer and businessman Dick Smith (1986 Australian of the Year) published a stinging attack on the Department (Smith, 1984).

1986. "Independent" May report asserted that the nature of the public interest had been changing, with a new emphasis on economic efficiency and responsiveness to consumers. In earlier eras, emphasis had been on developing a safe and viable aviation industry.

1 July 1988. Civil Aviation Authority (CAA) established as a statutory authority with both regulatory and air traffic functions.

18 Feb. 1990. Dick Smith appointed chairman.

11 May 1990. CAA becomes a "government business enterprise", on a commercial footing.

30 Oct. 1990. Economic regulation and the two airline policy abolished.

18 Feb. 1992. Dick Smith stepped down as chairman.

Feb. 1993. Captain Alan Terrell appointed by the CAA Board to report on the effectiveness of the operations of the Safety Regulation and Standards Division.

11 June 1993. Monarch Airlines RPT Piper Chieftain crashed at Young, seven fatalities.

2 October 1994. Seaview charter Aero Commander crashed near Lord Howe Island, nine fatalities. Government announced an independent statutory authority a week later. The Minister referred to the "inherent conflict between the CAA's commercial and policing functions". Of course, the functions were 'commercial', because the Government had deemed them so.

1 July 1995. CAA split into three:

- *ASA:* Airservices Australia, Government-owned corporation, responsible for airspace

- procedures (until 2007) and air traffic services, to standards set by CASA;
- *BASI*: Bureau of Air Safety Investigation: first (1952) a branch within the Department; merged on 1 July 1999 with rail, road and marine safety investigators into *ATSB* Australian Transport Safety Bureau, an independent division of the Department.
- *CASA*: Civil Aviation Safety Authority, statutory non-commercial authority under a board and accountable to the minister. Sets and enforces standards and rules, licenses pilots, certifies aircraft and operators, regulates air traffic systems and conducts education.

March 1996. Labor Government replaced by a (conservative) Liberal/National Party Government. Both major parties supported a managerialist agenda and the issues debated here do not easily correlate with the complexion of the government.

6 May 1997. Smith returned to the Board as Deputy Chair.

25 Sep. 1997. Director Leroy Keith resigned after a vote of no confidence, deemed by a majority of the Board led by Smith to be too cautious. 24 Dec 1997 Smith won chair.

22 Mar. 1999. Smith resigned after 15 months, after CASA Board unanimously backed Director Mick Toller who had ended an experiment in airspace reform that Smith had pursued.

9 Oct. 2003. Legislation passed to abolish CASA Board, leaving CASA as a statutory authority.

12 Feb. 2009. Minister announced legislation to establish a 5-member board for CASA and create ATSB as a statutory agency within the Department, with three commissioners.

MEASURES OF SAFETY

Statistics

Australia is widely considered by Australians to have the best aviation safety performance in the world. The record is not as simple as that. Certainly, there have been no deaths from accidents involving a commercial RPT jet aircraft (Table 1). However, numerous other global airlines have also never had a jet fatality, though few as large as Qantas, the privatised national carrier.

Table 1: Accidents and Fatalities in Australian Registered Aircraft 1995-2004¹

Category		1995	2004	1995-2004
High capacity RPT	Accidents/Fatalities	0/0	0/0	12/0
Low capacity RPT	Accidents/Fatalities	4/2	1/0	25/10
General aviation	Accidents/Fatalities	214/37	134/21	1773/342

As this study is primarily about governance, precise measures of Australian and international performance are not central. However, some observations can be made.

First, there has been no crisis in aviation safety, at least if measured by numbers of accidents or fatalities. There has been a downwards trend in both, against a major rise in traffic. Second, the gradation is not smooth: any observations about trends depend upon the choice of first and last years in any series; and there can be a significant difference between numbers of fatal accidents and numbers of fatalities.

¹ATSB website formerly www.atsb.gov.au/aviation/stats/index.cfm, downloaded 2007; and now <http://www.atsb.gov.au/publications/2008/pdf/AviationStats.pdf> downloaded 2009.

Interestingly, the accident rate for general aviation was more than ten times that for RPT. This remarkable statistic deserves investigation. This figure seems too high to support the claims of deregulationists that industry is inherently safety conscious. It is comparable with overseas statistics. The general public is more tolerant of mishaps in general aviation, regarding GA pilots as responsible for their own fate. (By contrast an accident on public transport breaks the contract between passenger and operator, that a ticket will convey the passenger to the destination safely (Young & Faulkner, 2005)). However, even for GA, the trend has been downwards: fatal accidents per 100,000 flight hours declined from 1.41 in 1990 to 1.14 in 2000 to 0.86 in 2007.

Worldwide, the number of crashes and fatalities dropped more-or-less steadily in the decade to 2003 and has plateaued since then. The fatality rate continued to decline in every region. Engine failures had dropped from ~60/100,000 flying hours in the piston era to less than one for big jets even by the mid-1970s (Ramsden, 1976:156). Flying is so safe that a single accident can cause wide statistical fluctuations, masking trends.

Aviation accidents are spectacular and attract public attention enormously disproportionate to the numbers of victims, when compared with miles travelled or automobile accidents, although a bus crash attracts a comparable degree of attention.

Alternative Measures

Is there a normative standard for measuring safety? Measures cited in the literature include fatal accidents or fatalities per passenger-mile or 100,000 hours, fatal accidents or fatalities per flight or hour. Total numbers of accidents, a newsworthy statistic, is different from accidents or incidents per million passenger miles, hours travelled or landings. Airlines flying long intercontinental routes have fewer dangerous landings per passenger-mile than commuter and regional airlines. 'Hull loss', an economic figure that has remained static in recent years as insurers have more readily written off older planes, can be contrasted with 'hull destroyed', meaning physically destroyed, a statistic that has been steadily improving (Broderick, 2001).

Cobb & Primo (2003:154-60) presented six current definitions: the statistical probability of dying, no one killed in a crash, absence of unsolved crashes, in-flight or ground performance of planes and airlines and invulnerability to terrorism (not covered in this paper).

The study quickly revealed – as 'old hands' in the industry know well – that tabulating the trends is fraught with traps. For example, different sources use different units, general aviation can be defined to include or exclude charter, recreational flying or on-ground fatalities; in Australia reporting procedures were amended in 2003; and so on. International comparisons are particularly problematic: not all countries even have a mandatory reporting system (Braithwaite, 2001:31). One can conclude that there is no universal, absolute measure of safety, as different indicators measure different aspects of the system's performance; but trends can be tracked within a country by comparing performance over time using one consistent metric.

Of course, numbers of lost time incidents is a measure of past performance not future risk. Incidents may just happen to cause fatalities by "the narrowest of margins" (Ramsden, 1976:16) and the numbers of fatalities depends on load factors. Woodhouse & Woodhouse (in Braithwaite, 2001:30) regarded accidents as a better measure than fatalities because survivability is a matter of chance, but this cannot be any more true than asserting that accidents are a matter of chance. Tiny variations in judgement or circumstances could have rendered any near miss a catastrophe.

There has been a string of near misses in recent years (APH, 2004). On 11 October 2006 statistics of 309 near misses in the previous three years were tabled in the Senate. Only a few seconds separated two planes in Sydney in 1971 risking 300 lives; two jets came within a second of colliding near Broken Hill in 1995 (Braithwaite, 2001:245); the Qantas Bangkok incident in September 1999 could have been a disaster if the airfield had not been bounded by open space (Smith, 2005:25). In July 2004 a Qantas 737 with 87 people flying into Canberra 11 miles off course descended 1600 feet below the legal minimum safe altitude and only the “last resort black box warning system” prevented it from flying into a mountain. There was full radar coverage but *no air traffic control* — in the nation’s capital (Smith, 2005).

The inquirer stands on quicksand in attempting to tally even just past accidents in the industry, let alone other dimensions of performance. One cannot help but conclude that there is no such thing as a value-neutral statistic.

ACHIEVING SAFETY THROUGH SYSTEMS AND STANDARDS

A fundamental mechanism for achieving safety is the setting of standards — for aviators, machines, maintenance programs and aerodromes. The volume and detail of the corpus of safety regulations in aviation are remarkable. Internationally, ICAO sets global standards, then CASA translates those into Australian subordinate legislation. Clocks, spare parts, manuals, flying hours on each kind of machine, maintenance... all are regulated. By contrast, once motorists are licensed at age 17 or 18 and their automobiles registered, neither need be inspected again until old age, as renewals are more-or-less automatic upon payment of fees.

It is widely agreed that by the mid-1980s the Australian regulations had become too complex and anachronistic. But that does not give any hint as to whether the remedy lay in more government action or less: Yeend claimed that by 1985 there was a first class team within the regulator “already tackling a major up-date” (1994:402) but pilots’ lobby group AOPA claimed that the rules were a product of empire building petty bureaucrats: “...voluminous and disorganised sets of orders, rules, regulations, standards and sundry publications... [drafted by] twenty odd legal buffoons” (2000).

‘Affordable Safety’

At the heart of the reforms of the 1990s was the concept of “affordable safety”, emerging in 1986 (APH, 2004) and popularised by Dick Smith, who however maintains that it is not a ‘concept’ but a ‘fact’ and admits only to having a prosaic focus on better value for money (Smith, 2001). Affordable safety has had three main justifications. First, *safety costs money* and if safety regulation or procedures become too suffocating, they will reduce the viability of the industry, a condition assumed to be against the public interest (a contestable assumption).

Second, *increasing ticket prices forces people onto the less safe roads*. In the 20 years from 1983, 39,815 Australians died on the roads but no one died in a commercial jet. Given that commercial jet travel is extraordinarily safe by any measure, it is undeniable that if safety regulation were to increase costs so that more travellers were forced into cars, it would reduce overall safety and presumably be against the public interest. But people choose modes on other criteria as well, and the evidence that potential fare-paying air passengers are forced into motor cars is contested. Then Minister Peter Morris said (1995:53) there was none. Arguably, the comparison is invalid as most road trips are in cities. The correct comparison would be with long-distance coaches and rail. If flying were defined to include non-jet travel, the relative margin in favour of air would deteriorate (Ingham, 2001).

Third, *expenditure on safety should focus on functions that save lives*: bureaucrats should move out of Canberra into surveillance, for example. Finite safety dollars should be allocated where it will have the greatest effect on safety (Smith, 2001; 2004b) an indisputable proposition: the only logical alternative to affordable safety is ultimate safety, which is unachievable. Manufacturers and individuals make trade-offs between safety and cost continually. The FAA performs cost-benefit analyses on all proposed regulations (Cobb & Primo, 2003:20), as every department in Queensland is required to do.

However, the policy has some logical consequences that are more controversial. One is that regulation on the smaller and charter operations should be lighter. Another, consequently, is that a life in general aviation is less valuable than the life of a regular-transport passenger. Third, it legitimises cutting the cost of running ASA/CASA/ATSB, to reduce fiscal outlays and to make air travel cheaper by reducing charges upon operators (where the nexus is established). This commercially-orientated view of the public interest is distinct from the value-for-money view Smith had publicly espoused (Nendick, 1994).

“At its core, safety isn’t cost-effective” said Schiavo, former US Inspector-General of Transportation (1997:48). The marginal cost of preventing fatalities in aviation is very high. In Nader & Smith’s words (1994:317) “Safety always extracts a cost, whether in money, time, convenience or all of these.” That society places a limit on safety expenditure or, more bluntly, that human life has a price, is manifest in the fact that the budgets for road improvements are always contestable and always limited. One has only to visit a public hospital to learn that life is not sacrosanct, that there is a continual trade-off with financial expense. To Ramsden (1976:76), the fact that no airlines offer all rear-facing seats or full-body webbing restraints was evidence that safety can take second place to convenience or profit.

US Congressman James Oberstar (cited in Bailey, 1994:318) opined that “The standard set in that law [US FAA Act 1958] is not ‘whatever safety you can afford’; not safety at the margin; not the bare minimum of safety — but safety with all its redundancy, backups, fail-safe devices and all the caution our inventive genius can build into aircraft and the air traffic control system to assure safety...”. Yet the Act cannot be an anchor for a normative standard as the Act is a variable. In any case, the word “all” is contestable and in the extreme, cannot be true. Bailey (1994) said that affordable safety is nonsense, as it implies that safety is precise enough to be allocated on the basis of dollars. But statistics can suggest where the greatest return on additional investment can be achieved and road safety will usually surpass other modes.

To deny that there is such a thing as affordable safety is to deny that risk can be measured. On the contrary, there are reputable risk analyses that recognise gradings in *severity*, from negligible to catastrophic; and in *probability*, from improbable to frequent (Wood, 1998). Once the existence of a matrix like this with even a single dimension is accepted, it follows that value for effort invested in safety can vary. As effort in an enterprise can be notionally equated with money, there is a value for money axis which translates to affordability. In conclusion, there *is* such a thing as affordable safety, but in the way the slogan is applied by decision-makers there lies fertile ground for controversy.

Can Government be Blamed for Everything?

Broderick (2001) found a remarkable correlation between accident rates and effective governmental implementation of ICAO’s standards. He credited part of the global improvement to ICAO’s move in the mid-1990s to mandatory audits. “...good government aviation safety oversight results in airlines having good safety records. It’s that simple!” If it really is that simple, the converse conclusion also follows: if things go wrong, the government can be blamed.

The evidence about adherence to standards, let alone its significance or its origins, is contested. By letter on 30 March 1993 to CAA, Captain Terrell observed “‘that safety standards/levels have been reduced so that they are closer to the regulated margins.’ The reasons for this reduction were deregulation, devolution and delegation to industry, commercialisation and a major economic downturn.” (Plane Safe, 1995:27; Braithwaite, 2001:279). One interviewee claimed that the margin over and above the minimum regulated standard had been dropping as in cost-conscious airlines every dollar spent above that standard must be justified. Less is spent on prophylactic tactics (Beaty, 1995:291). Australia abandoned its practice of having Flight Checking Officers track pilots’ progress and inform them of changing weather conditions and other nearby aircraft (Braithwaite, 2001:240). Unionist Adams (quoted in Robinson, 1999) observed that there used to be a Boeing standard and a (higher) Qantas standard, but now Qantas has closed the gap.

The James Reason model of safety preparedness portrays accidents simply as occupying the apex of a pyramid of causation that fails at several levels. Reason’s model is now internationally mainstream within aviation circles, though Young & Faulkner (2005) have argued that the pendulum has swung too far toward blaming management for latent systems weaknesses. There is still such a thing as human error.

In CASA’s “performance milestones” for 1999-2000, occupying nine pages, the number of crashes does not appear (CASA, 2000). Critical success factors are presented in corporate terms: for example, “Standards that are appropriate, clear, concise and aligned with international practice”. These are more-or-less measurable and directly attributable to CASA, while a crash is not necessarily the fault of CASA and it cannot be held to account for irresponsibility of pilots or owners. Or can it? If safety is an interconnected system, with the regulator/educator at the apex, then arguably the regulator is responsible for every mishap.

Or is it? Doesn’t ‘the government’ stand superior to the regulator? To operating pilots, a letter from ASA or CASA is just a letter from ‘the government’, but the bureaucratic insiders don’t and cannot function that way. CASA is entitled to argue that, as a creature of central government, it has served the public interest if it fulfils the performance indicators that ‘the government’ has handed down to it. Assuming for the moment that it is even possible to specify safety outcomes, the entity setting up the regime — ‘government’ — carries responsibility for getting these settings ‘right’. Yet the very device of establishing a statutory corporation removes some of the levers that central government can push. As the meaning of ‘government’ elides between ASA, CASA, the Department and the ministerial office, accountability elides with it.

Pre-conditions for the satisfactory exercise of the individual responsibility beloved of neo-liberal reformers are that individuals be informed and operate within an understandable regulatory system. Who is responsible for their education and for the regulatory system? Government. Government services are essential for smooth operation of even a self-regulatory regime. And governments shape markets, by setting bounds through regulation, by policing and by adjusting taxes and subsidies. So government can be blamed for everything that goes wrong. It must always be so, because in Australia and other market economies, corporations are expected (and even required by legislation) to pursue their own (shareholders’) interest. The fulfilment of public good functions on the collective behalf is the responsibility of governments (and civil society).

ACHIEVING SAFETY THROUGH ORGANISATIONAL RESTRUCTURE

For decades the Department of Aviation/Civil Aviation held all functions within its embrace. Airports were the first to depart. In 1985, the House of Representatives expressed satisfaction that the Department has divested itself of many of its airports, so removing a conflict of interest (HRE, 1985) and aiding transparency. Yet in 1987 announcing the abolition of economic regulation and the establishment of CAA, the then Minister Gareth Evans wrote (1987) of the “strong logic” of retaining all the remaining elements in an integrated system. This logic did not survive. Painter and Sanders (1995:28) went so far as to describe CAA as “an unequivocal blunder in administrative design and practice, from whatever angle you look”.

The next position, that CASA should be a semi-autonomous regulator removed from political interference, also did not last, for in March 2003 the Minister when introducing legislation to abolish the CASA Board observed that “Currently, the minister remains publicly *accountable* for CASA’s performance...but lacks the necessary direct *authority* to improve its performance...” (Anderson, 2003a; emphasis added). The Department described the new arrangements as delivering “much greater accountability”, “greater clarity in the delivery of functions” and more separate reporting (DOT, 1995:27,28). This arrangement also did not endure.

Ironies bound. The Department of Finance (DOF, 1995:5) in describing new arrangements for administration of government business enterprises as strengthening their accountability, noted the enhanced role for the Minister for Finance who now had to be consulted on all major matters, overlooking that accountability shared is accountability diluted. Budget-funded entities delivering public goods under the iron fist of Finance can hardly be ‘accountable’ for their results. Accountability was also dispersed by restructuring into three daughter bodies, as is next explained.

Airservices Australia

The commercial focus of this “service provider” is plain, that term alone revealing the underlying rationalism. Its glossy brochure *Airport Services* (c.2001) stated unashamedly that “The business has been structured with efficiency in mind...”. The “benefits of effective safety and environmental management systems” were listed as:

- “• minimising insurance premiums;
- controlling cost of accidents and incidents;
- safety can equal efficiency in a business;
- early design for safety avoids over engineering;
- increases shareholder value; and
- regulator intervention is reduced.”

Aviation and fire rescue services are provided so that airport managers enjoy “a reduced exposure to liability and insurance...”. Chief Executive Bernie Smith in addressing Safeski's 2001 noted that ASA’s corporate objective is to provide a return to the owner (the Government) and to foster and support aviation, though these are subject to an over-riding obligation for safe operations.

Another interesting aspect of ASA’s material is that compliance with the regulator’s directives is regarded as evidence of safe practice. In this way a *minimum* standard transmutes into an *appropriate* if not the *optimum* level of performance. ASA can hardly be blamed for this as it is a mere service deliverer, an implementer of others’ judgement about what is safe. A similar logic is visible in the defence by the Australian Airports Association that privatised airports are safe as they fulfil statutory obligations (Keech, 2006).

The Annual Review 2000 of ASA was suffused with the language of financial efficiency, profitability, customer service and returns to the Government as (sole) shareholder. The “progressive adoption of a commercial culture” was explained as a deliberate intent ahead of corporatisation (ASA 2000:ix).

That commercial pressures are strong is evidenced by former US Air Force safety chief Dick Wood’s statement (1998), perhaps overstated for emphasis, that “Aviation Safety has grown up! It is no longer bulletin boards and safety meetings. It’s economics. It is a means of controlling uninsured losses.” Certainly safety is proclaimed to be the “most important consideration throughout all its activities”, but apparently because “our reputation in safety is crucial to our future competitiveness and ability to exploit new business opportunities” (ASA, 2000:2). It is not difficult to understand that this language would offend long-time employees who joined the industry in an era when safety was worthwhile because it was a public duty and when cost took second place to reliability.

Maybe the reformers were justified: in 1999 and 2005, ASA won the IATA’s Eagle Award as the world’s best air traffic services provider.

Australian Transport Safety Bureau

The Bureau proudly proclaims itself as ‘independent’ because it is institutionally separate within the transport portfolio from the regulator, the service deliverer and the policy office. The *Transport Safety Investigation Act 2003* provides that the Executive Director is “not subject to directions from the Minister or the Secretary” in exercising their powers under this Act (s.15). However, the depth of independence is contestable. Some claim that the body cannot be independent unless it is situated within the Department of Prime Minister and Cabinet and so not accountable to the same minister as CASA; or even directly funded by the parliament so that it is ‘independent’ of all ministerial departments. On funding, an insider wrote anonymously: “The [US] NTSB gets its funding by a direct allocation by Congress. We do not. Our budget is determined by the Secretary of the Dept and is being steadily tightened.”

Seven years later, the 2009 amendments seem to address this long-standing issue. When ICAO in its February 2008 “Safety Oversight Audit” (AIG/01, 1-6-01) gently chided Australia because the performance indicators had been based on the budget allotted to ATSB, whereas ideally, the typical number of accidents and incidents should be used as a basis of *determining* the budget, this was one of the only 3 out of 48 findings that Australia declined to accept at least in part – because it was “impractical...within resources available.” Budget was driving safety, still.

Civil Aviation Safety Authority

Before the reforms of 1988 and later, the staff had apparently been proud of their record: “...there was, over a period of 40 years [1948-1988], a complete body of safety regulations established... It was not perfect, but it was the foundation of the best safety record in the history of aviation” (Yeend, 1994a:2,5,6). Yet “Despite our record and experience, the industry clamoured for a new civil aviation authority, loudly supported by the aviation press in the late 1980s. I am one of those who was in that process labelled as part of the dead hand and the cement-headed bureaucracy of the 1980s” (1994:6). Yeend deplored the self-serving capture of the Authority in the early reforms by “some industry operators and adventurers” and the destruction of corporate expertise.

Either his was a rose-coloured perspective or relationships deteriorated rapidly in the wake of the restructure. By 1989 more than 61% of staff in a survey said they would not recommend CAA as an employer (John Walker, 1989). Worse was to come. According to witnesses Foley and Haines, within CASA there was instituted a “culture of fear, fiat and favouritism” (TQS, 1994) commencing in early 1991, when under Dick Smith the Authority was reviewed and restructured.

New Zealander Frank Baldwin was recruited as CEO by Smith, with “a reputation as a change agent”, a “crusading, single-minded executive” (Painter & Sanders, 1995) but described by one insider as simply a bully. Baldwin “shared Smith’s zeal for reform. He described his brief as ‘to take the CAA - an inert, centralised, bureaucratic edifice — and turn it into an efficient customer-oriented business enterprise’...” (Plane Safe, 1995:111). Bailey (1994) said Baldwin and his academic mate/deputy Rob Edwards left “disgraced”.

The mid-1991 Review of Resources aimed at cutting more than 50 per cent of staff over 5 years. Redundancies commenced on 30 Nov. 1991: 7332 reduced to 5078 by Jan. 1993 (Painter & Sanders, 1995) and c.3500 over 5 years. Staff in Safety Regulations and Standards fell from 736 in May 1991 to 511 in Jul. 1993 (DOF, 1995:10; Plane Safe, 1995:113). Bitter recriminations followed about loss of expertise and corporate memory. Redundancy that talented people couldn’t refuse was offered.

The divisions managing core business would be profit centres (Plane Safe, 1995:114). Several submitters believed a review was necessary and benefits included less red tape, lower costs, transfer of staff closer to industry, delegations to district staff and an increase in surveillance. But “the overwhelming reaction to the changes from within the CAA was one of uncertainty, fear, resentment and antagonism towards senior management and between CAA staff.” (Plane Safe, 1995:15).

It is not difficult to observe the tensions which were seething within the organisation. Some 60% of the comments made to the Terrell Review panel were in camera. Terrell was concerned that if they were aired publicly the public might lose confidence in the regulator (Foley & Haines, 1994). “The loss of skill, corporate memory and stability are the legacies of the struggle”, of the civil war within the Authority (Plane Safe, 1995:121). “The guts of CASA [CAA] has gone... Management cut too hard, decimated the organisation” said one respondent. The culture in this organisation “...has been totally ruined and it is not easy to revive that kind of culture” said witness Tsipouras (1994:2/30). CAA was a “rudderless ship” (TQS, 1994).

International consultants Sypher:Mueller were engaged to report. The consultants did note some positive results such as increased delegation to districts. But their study (1993:i) found “a number of major problems”. The most serious was duplication of effort and resources between two of the branches. There was ineffective matrix management and a misunderstanding of roles and responsibilities (1993:37). Project management was deficient (1993:13) and there was misunderstanding about what constituted policy and who may decide it; and even misunderstanding about a memo from the Director attempting to clear up that confusion (1993:14). “The previous Head of Standard Development had been required to apply for his own job four times in the past two years” (Yanda, 1994:576). There was resentment in the way that staff cuts were determined and concern at the loss of technical expertise. These are symptoms of poor organisational management, not necessarily commercialisation as such, although the imperative to cut costs may have subordinated a more sensitive approach to management.

Two descriptions of the attitudes of staff to the reforms can be discerned:

- traditional self-important bureaucrats, suspecting their fiefdoms threatened, dug in out of myopia and self-interest to resist the long-overdue introduction of efficiencies to the organisation and to the stultifying mess of pettifogging regulations;
- traditional aviation safety experts formed an inhouse opposition to the bumbling incompetence of their managers and their cosiness with industry, and, in the name of the public interest, were determined to defend the most valuable practices of which they were the current custodians.

No doubt both applied at times, to a variable extent for different individuals. While an organisational restructure may be necessary from time to time to prevent sclerosis, it is hard to avoid the conclusion that the two-decade long ructions in CAA/CASA have been uncondusive to effective safety. A leaked internal audit said changes in management practices were responsible for the failings in aviation regulation (Castle in Charlton, 2001) and that supervision had slipped to the point that the airline industry was self-regulating (Creedy, 2001; Marris et al, 2001). But whether the reforms of the 1990s were a cause or a partial cure is unclear.

Smith had felt a profound sense of failure over the non-completion of his agenda and the ignominy of his departure in 1999 from a second stint at CASA (Shanahan, 2001). Smith announced in mid-2001 that he would campaign against the Minister John Anderson in the forthcoming election. He subsequently withdrew that threat, concluding that a change to Labor would not reform aviation (Koutsoukis, 2002a).

In 1994, AOPA was calling for a new agency responsible directly to the minister, independent of CAA (1994:473). By 2001 AOPA had changed its mind. Its president advocated a structure which would strip CASA of its policy and law-making functions and leave it with compliance (Walker, 2001). There would be a new peak regulator responsible directly to Parliament, in the hope that this would depoliticise the role. This would place a regulator overseeing a regulator outside the control of executive government.

To the main union representing CASA staff, “The problem with Smith is that he never blames the leadership, always the staff” (CPSU, 1998). To Smith, this is the squeal of frustrated self-interest and he described CASA as “like the ABC [Australia’s public broadcaster], a group of worker collectives”. Over the years Smith has variously blamed, often with intemperate language, the air traffic controllers, the unions, airline pilots, the major airlines, CAA, CASA, BASI, ASA and ministers for cronyism, weakness and self-interest (e.g. Smith, 2004).

Smith was generous with his time when approached. He dated his interest in aviation reform from his circumnavigation of the globe in 1982, during which trip he concluded that aviation in the USA was “light years ahead” of Australia, a contestable view. During interview he returned again and again to rail against the *cost* of the safety regime even though he conceded that this was primarily an issue for general aviation, not RPT. To the big airlines, the cost of airspace and CASA’s regulation are a very small part of total costs. Also, regional airlines enjoy selective financial support from governments for regional development reasons. It is general aviation and charter that gets squeezed.

Did Dick Smith perform an essential iconoclastic function, albeit leaving some unnecessarily bruised people in his wake; or was he essentially a well-meaning adventurer out of his depth in managing a complex, modern multi-lateral bureaucracy? Dannatt (2002) concluded after extensive interviews that instability in policy followed destabilising changes in CEO, Chairman and Board personnel. Different Boards held different philosophical approaches to regulation and

the legislation “placed few barriers in the way of changing policy”.

In viewing the disaffection of the staff for whose welfare Smith was responsible (Koutsoukis, 2002), and the turmoil through which CASA was dragged, it is impossible to avoid a sadness that he, subsequent reformers and the governments under which they served made such heavy weather of reform and that it proved to be so alienating to staff who had collectively been running what they regarded as the most effective aviation safety regime in the world. If only there had been an appreciation that “There are more than two temperatures at which to cook a pot of stew...” (Dempsey & Goetz, 1992:327). If only there had been someone channelling Smith’s abilities, such as by installing a meticulous team-leader to run the bureaucracy, leaving him as an advocate and conscience-pricker. The people in charge could have done better.

ACHIEVING SAFETY THROUGH PROXIES

Delegating to Satellites

Governments are driven by ideas considered worthwhile by influential actors. Ideas can come from a number of sources. An insider recounted that Liberal parliamentarian John Sharp, later Minister, had lost a friend in the Young accident and had strong views about how safety should be administered. He made it impossible for the then Government to ignore. Labor Minister Laurie Brereton “leapt to the bait” and the saga of reform commenced. There was no crisis in aviation safety, but even stable bureaucracies sometimes respond to moral panic.

This insider, secretary of one of the committees of inquiry, considered that it was not the federal bureaucracy driving the rationalist reforms but Dick Smith, and the people he imported for that purpose. If so, then the key question is why was Dick Smith attractive as a candidate?

On assigning the differentiated roles to CASA, ASA and ATSB, it becomes vital to strengthen the capacity of the centre to formulate across-portfolio *strategic policy*. From the reforms of 1988 there was no visible centre of in-depth aviation expertise available to help the Government or CASA decide what are strategically desirable directions. To craft policy requires an independent research and analytical capability. CASA does not even hold a professional library in its own building. It was seriously entertained to get rid of the library as a cost-saving measure. (Eventually this was shared between ASA and CASA and remains housed in ASA’s building).

Former Minister Morris said that CASA is supposed to be the best source of advice in the country on aviation safety, but that can be true only in matters of technical detail, because its constitution does not permit it to depart from the charter and role handed down by the Government. The Government looks to CASA to advise it on safety and CASA looks to the Government for direction. So long as CASA reports directly to the minister, there is a risk that the skills of the Department in aviation policy will hollow out, as it is not directly responsible.

A First Assistant Secretary admitted as much in evidence to Plane Safe: the Government’s role is to check that CASA is “complying with accountability requirements...” meaning overseeing information in the annual report and corporate plan: (Fanning, 1995:327). “We [the Department] do not have safety regulation expertise, as such. It would be a complete duplication of effort...” (1995:328). The Chair observed something similar: ...there was a mass exodus of people with skill and seniority... and no-one was saying anything” (Morris, 1995:330). The economic rationalist reforms of the era disaggregated the portfolio and weakened the centre. Boards are creatures of legislation and logically cannot be responsible for policy about the legislation. As semi-autonomous entities accumulate within a portfolio but outside the Department, the

responsibility for policy oversight and coordination between them migrates to the minister's office. Here is one source of the widely reported politicisation of public sector functions.

Cyclically, governments tend to split policy from operations but then consolidate; though separation has been the trend under managerialist reforms. An anonymous departmental secretary in Halligan et al (1996:29) declared rather flippantly: "I'm a firm believer in the tidal theory. You devolve until something goes wrong and then you're inclined to bring that back". This seems a capricious and a-theoretical basis on which to base fundamental bureaucratic reform.

Smith said he observed a remarkable difference between the time when he was first chairman, when the Department had a real vision, and the time when he returned, by which time it was hostile or neutral. There was not even a vision different from his and no-one with vision or with sufficient courage to make changes. He had been convinced that the reason was the weakness of the minister but was quite open to the suggestion that it was a weak Department that lay behind this lack of institutional capacity. This is more plausible. A politicised or passive bureaucracy, with only a partial mandate over the portfolio, viewing all issues through the rationalist lens of cost-efficiency, delegates issues upwards where the minister is challenged by their technical complexity and the difficulty of placating contending protagonists, each claiming technical expertise and public interest motives. Thus have the seeds of the new public management, sown in the 1980s to make the public service 'responsive' and 'efficient', borne their sour fruit.

Appointed Boards

The statutory authority has an honourable history in Australian public administration (Trollope & Heatley, 1994; Stretton, 2005:67). By creating corporate or statutory entities to run businesses outside the confines of the Consolidated Fund, governments have been able to build works and run enterprises without the risk-averseness that tends to accompany public service operations. The quintessential example is the post-War Snowy Mountains Hydro Electric Authority but there are modern cases such as the Sydney Olympic Coordination Authority.

The semi-independent boards appointed in aviation (CASA, ASA, Federal Airports Corporation) are there for subtly different reasons: not only to perform operational works efficiently but to disperse accountability and to save costs. They are performing functions that in an earlier era were considered core government business. The formation of CASA/ASA was part of a worldwide agenda to turn bureaucratic guardians of the public interest into commercialised service providers.

A board with executive powers may enable the minister to cope with complexity. Faced with an industry riven by technical and personal dichotomies, the appointment of a knowledgeable person whom the minister trusts to chair a representative collection of experts is logical. Former Minister Morris observed that it is impossible for the minister to both set standards and be personally answerable for every decision of the regulator. Traditionally, this dilemma has been resolved by delegating responsibility for all but high policy to the department. Unless the minister personally has a strong grasp of the subject, their political advisers — non-public servants commonly appointed for quite different skills — assume a very influential role. To aviators, flying is central; to the minister, aviation may be only a small part of the portfolio: at December 2004 arguably the Minister had the equivalent of four full time public offices other than Minister for Transport.² His office said that his workload was "lunacy".

²Deputy Prime Minister; Leader of the federal National Party; Minister for Regional Services; Member for Gwydir.

A corporate board does allow an entity to remain within the ministerial portfolio while reducing the risk of groupthink or ‘regulatory capture’ within the department, though it is at least as plausible that capture is more likely with a board comprising industry representatives, as Dannatt (2002) contends. A multi-lateral board can act as a stakeholder advisory committee, but this function would seem not to have been satisfactorily fulfilled by CASA for in February 2000 a separate Aviation Safety Forum was established (CASA, 2000:92,3) to “provide strategic guidance to the Authority in relation to the performance of the Authority’s functions...” (CASA, 1999).

In theory a statutory authority can separate the minister from political pressure (Yeend, 1994:403), but ironically it can increase it, by removing the department from the chain of command. As for ATSB, CASA’s legislation (s.12(2), *Civil Aviation Act 1988*) enshrines the principle of non-interference (“Directions as to the performance of its regulatory function shall be only of a general nature”), suggesting that it is not necessary to establish a board in order to establish this independence. Also, there is a tension between independence and relevance: a board appointed to be free of (political) influence is likely by that very attribute to be irrelevant to the policy and decision-making processes (Adams, 1995:1528,9). It has been a public service joke that boards exist so that ministers can sack them.

In practice a separate board does not allow a minister to deflect blame. The minister is responsible to Parliament for the welfare of the safety system. “Safety is one issue guaranteed to land on the minister’s desk whatever the regulatory and jurisdictional arrangements” (Painter & Sanders, 1995:43). As one departmental secretary expressed this principle: “I can’t say to the Minister, ‘Don’t ask me, ask the statutory authority’” (Halligan et al, 1996:29). “However much politicians or civil servants may want to ‘opt out’, the core is still the place where decisions have to be made and results have to be delivered” (Gerodimos, 2004:926).

Weller (1998) remarked on a comparable diffusion of responsibility in the Queensland prisons system and concluded that “Purchaser/provider splits and corporatisation...are inevitably facades when crises occur. ...Public responsibility must take precedence over the private or commercial interests.” In the public mind if anything goes wrong with a public function, the minister couldn’t avoid being called to account, and for safety this stands to reason as the regulator is exercising the sovereign, coercive power of the state.

Elder statesman of aviation safety Peter Lloyd observed (1997) that there is really no need for a board at all. There is no substitute for leadership by an individual who is accountable. Boards go astray when they either become involved in detailed operations (as did the CAA in Smith’s first stint) or fail to ask the probing questions of management (as Smith claimed had been the case for more than a decade). Certainly, a board is understandable if the entity is being primed for privatisation. Was this a driving force? This may well have been so initially, and perhaps even in 2007 this was partly animating the divorce of airspace reform from ASA.

Dannatt (2002) observed that a consequence of separating the regulator from the executive government is that “the agency lost its protection against action under the law of tort.” The risk of litigation engendered a “conservative” or cautious approach to enforcement.

Missed Opportunity

Businessman John Uhrig was appointed by the Government to report on corporate governance of statutory and semi-governmental boards (Uhrig, 2003), but the opportunity to craft a contemporary theory of public administration involving satellite entities was missed. The report at its outset stated that it eschewed theoretical considerations in favour of the “practical” insights from targeted consultation. So there are such trite-isms as: “Governance is about ensuring the success of an activity. ...Success is meeting the expectations of the owners. ...Good governance is the presence of governance in the most appropriate form”. In the absence of a conceptual framework or any theory of its own (Holland, 2004:66), the report is reduced to recommending a number of procedural refinements to the current administrative arrangements and with one important exception, offers no real guide to the ingredients of a successful regime. Meredith Edwards (2004) in advancing a set of ten indicators of good performance of private and public sector boards, noted the absence in the literature of well established normative criteria.

Significantly, Uhrig did recommend that boards be classified into executive and non-executive. Authority to act and responsibility for results should go hand in hand. This is a sensible reform that is likely to endure.

Perhaps it is in his understanding of ‘success’ that Uhrig most errs. The ultimate ‘owners’ are the community, who don’t have a clue as to what is good aviation policy *pro tem* and rely on their elected agents and servants. ‘Success’ means not merely carrying out pre-formed government policy as a humble functionary. It includes not only a clinical application of the minister’s wishes but also maintenance of the public trust in the system. In the absence of a benchmark of public interest more detailed than “maximum cost-effectiveness”, the governance arrangements can readily reduce to the instructions of the minister of the day, and where the minister has not issued clear instructions, atomisation as individuals go their own way.

Lack of sophistication in understanding governance is not confined to Uhrig. The last Chairman of the CASA board Ted Anson saw the job as primarily one of corporate governance and, interestingly, “just complying with the act” (Koutsoukis, 2001).

ACHIEVING SAFETY THROUGH COMMERCIALISATION

The Budget Imperative

After January 1990, the savings made were estimated by Smith at over \$100m p.a. (about \$150m in Smith, 2005) and the figure of \$100m has not been disputed by others. However, what is contestable is whether this is a waste that has been pruned in the public interest from the regime; or represents the now-missing safety margin that a prudent nation should in the public interest be prepared to invest to keep its travellers safe; or merely reflects the installation of labour-saving technology. Is the system now ripe for a disaster or is it as effective as it can be without diminishing returns? And how catastrophic does a disaster have to be to justify spending >\$100m p.a. to avoid it?

The Plane Safe inquiry (1995:112) identified the pivotal events of the reforms to date. One was the announcement in Aug. 1990 that the Government would phase out the \$73m budget provision for safety regulation and that the costs would be met by industry. The 1991 decision to cut staff and funds seems to be the first manifestation of this exercise (Morris, 1995:335). Safety became caught up in the general drive for cost-cutting. But these forces were derivative, not primary. The pressure for a commercial approach came not from the travelling public, which does not particularly care about the cost of taxpayer-funded civic services it views as essential

(Plowden, 1994:306), unless some egregious examples of waste are paraded for ridicule. It came from AOPA and other industry and governmental insiders, especially the economic rationalists whose neo-liberal outlook permeated the senior ranks of the Australian Public Service..

Who is CASA Serving?

Government aimed to shift some responsibility to industry. The airlines were not opposed, because they felt that they could manage systems cheaper than government anyway. The airlines had a close relationship with the authorities and had a major influence on events. But smaller aviation companies were more averse, as they were caught in a “regulatory maze” with large costs for recording and monitoring.

The new concept of affordable safety emphasised *efficiency* in contrast to the old approach of *effectiveness* which pushed questions of cost into the background. Baldwin was cited as saying that if CAA were run as an efficient business, safety would follow, a proposition that is manifestly incorrect. The Flight Test Society argued (FTS 1994:111ff) that the post-1988 reforms were not supported by any transparent policy or philosophical analysis about public safety or self-regulation. Even the identification of air traffic control as a commercialisable service was philosophically faulty as this is essentially safety-driven. Yeend argued that “air traffic services...*obviously*...can only be undertaken by Government” (emphasis added) (1994:403). This highlights how the prevailing view about what is a core public good can vary.

By the mid-1990s, “The promotion of a partnership with industry, where the industry came to be seen as the customer of the regulator, contrasted with the view of the role of the regulator as that of a policeman, and the emphasis on outcomes challenged the procedures orientated operation” (Plane Safe, 1995:121). Through “affordable safety”, a stated aim of the CAA was to enable more people to benefit from safe aviation.” Under Smith, the CAA was encouraged to see aviation companies as customers; “the concept of a wider responsibility to a flying public lost much of its earlier sway” (Charlton, 1996). TQS (1994) said it is “nonsense” for CAA to regard industry as its customer: its primary responsibility is to the travelling public and those under the flight path. Bailey (1994) cited Baldwin and one-time transport secretary Roger Beale as both saying in 1991 that cost-effectiveness (sounds like ‘affordable safety’) is the dominant criterion for judging CAA and that industry is its customer. Both propositions express public interest in market terms.

If one is looking for a fundamental philosophical dichotomy animating the antagonism, this is it. Protecting the public interest involves very much more than serving some budget bottom line; or serving the legislation or the minister of the day. And if CASA is not serving the public interest, then who is; and further, it might as well be privatised, for there can surely be no justification for retaining a body within government unless it has a public interest purpose. One public good function that has suffered is training. As all bodies including the Department, Defence and the majors cut costs during the managerialist reforms, they economised on the intake of apprentices (ALAEA, 2000). A decade later, lo, there is an acute shortage of qualified engineers and tradespeople.

Extending this argument to the global dimension, there is an imperfectly articulated obligation to the international aviation community to share the workload of continuous improvement. The more ruthlessly that CASA is required to save costs, the more it will leave such public goods to ‘someone else’. Bailey (1994) mentioned that the Bird Hazard Investigation Unit, with an international reputation, was disbanded during the reductions.

Inherent Incompatibility

CAA's dual responsibilities for regulation and industry development were a cause of disquiet to the reformers. Bartsch (2004:17) attributed CAA's "poor performance" to the split mission. The 1995 amendments to the *Civil Aviation Act 1988* remedied this, specifying that the "main object" of the Act was "to establish a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents". None of the functions of the Authority (s.9) dilute the emphasis on safety, and s.9A clearly places the "safety of air navigation" as CASA's "most important consideration". In January 2009 these provisions were still operative. However glimpses of tensions are visible in some of the ancillary documents. CASA's 1998 Service Charter explained that its first priority is "to protect the fare paying passengers using public transport operations *while encouraging high levels of participation in aviation*" (emphasis added). Another priority was to ensure that safety standards do not unnecessarily impede efficient operations by the aviation community (CASA, 1998:3). CASA's 2003 Charter Letter (Anderson, 2003) stated that in addition to CASA's core safety obligations, it should also *permit* "development and growth in Australian aviation". Perhaps worse, the organisational chart in the Green Paper of December 2008 showed CASA as reporting both to the minister *and to the industry*.

Tensions of different kinds are visible within ASA's legislation. As with CASA, its legislation (s.9(1) *Air Services Act 1995*) specifies "the safety of air navigation as the most important consideration". It is arguable that this is compromised by the functions of "promoting and fostering civil aviation" which were assigned to ASA (though not until an amending Act in 1998).

One tension derives from its charter obligation to maximise profits by reducing costs and deflecting liability. The members of the Board are required under the rules of corporate governance to further the interest of the corporation, not the public interest. This is a weak barrier against a conflict between public interest and the self-interest of ASA, which Smith (2005) in his recent book *Unsafe Skies* described as being abetted by the conservatism of pilots and self-interest of the air traffic controllers' union. Smith drew attention to the conflict arising from the linking of remuneration for senior managers at ASA to financial performance (Smith, 2005:37 with documentary evidence). Even disregarding Smith's conspiratorial accusations (2004a) that ASA managers were motivated specifically to roll back the 2003 National Airspace System reforms so that general aviation will be forced to pay more in ASA charges, it is difficult to see this practice as other than scandalously neglectful of the public interest. Placing executives on performance contracts with a commercial incentive can motivate them to subordinate the undifferentiated public interest to the commercial imperatives (ALAEA, 1994; Ingram 1994:628). Policies of this kind ripple through an organisation quickly. Employees who could not display enthusiasm for labouring to increase their manager's bonus would fail to gain preferment.

Another tension is visible in s.13, the "need to earn a reasonable rate of return on AA's assets...". To this author, the logic in using return-on-investment, a measure of opportunity cost of private capital, to measure the performance of a provider of ongoing public services is opaque.

Destructive Competition

The market theory of safety is based on the assumption that it is in the economic best interest of owners and operators to maintain wide margins of safety (Nader & Smith, 1994:48). ‘Sudden death’ awaits any airline that underplays safety. In other words, the market guarantees safety. Dempsey & Goetz claimed that unlike many industries, for airlines, “the public interest is paramount, and market failure cannot be tolerated” (1992:358), an awkward and dubious conflation.

Market theory, by which the consumer is sovereign, would seem to require that the airlines compete with each on their safety record or practice. There is a hint of a tacit agreement among the carriers not to confront each other on that basis (Jackman in Nader & Smith, 1994:326 referring to the USA). The International Air Transport Association on 1 Sep. 2005 sidestepped an inquiry about this: “Whilst it is true that it is not particularly sensible to use safety as a marketing tool...IATA is not a regulatory authority and therefore have never been in a position to impose such a prohibition.” If there is even only a tacit understanding, the market theory collapses. The theory fails in two other aspects: there is no absolute threshold that divides safe from unsafe practice; and what the public does not know may not bother them (information is imperfect).

SEARCHING FOR A SERVICEABLE THEORY

The public interest lies in a decision-making process that is well-informed, not based on egos and personalities. Former Minister Sharp advised me in 2002 that when one becomes a minister, there is no text book, no handed-down definition of public interest, it is left to one's own judgement, which is not all that difficult, given common sense. Can a conception more solidly grounded in theory and history be discovered?

Flinders (2004:883) examined a range of British quasi-autonomous and semi-public bodies and noted the growth since 1979 in "distributed public governance". There had been a major increase in complexity and a major decrease in policy coherence but the changes lacked any underpinning rationale consistent with the Westminster model of representative government. The description fits Australian aviation safety. The trend had major "implications for successful policy delivery, public's trust in government and the future trajectory of the British state."

The question of where accountability resides is central to understanding public sector reform since 1982. More than one overlapping axis can be identified:

- a *policy core* and *operational* satellites;
- a *regulator* and the *regulated*;
- a *purchaser* and competitive *providers* of services.

Some of these splits can apply within single organisations (example: within CASA between the Board and the staff); others apply between them (example: between the department as adviser to the minister and the implementers CASA and ASA).

A contemporary ministerial adviser observed that to the extent that you can have immutable principles, the public interest is served by splitting regulation from service provision. This is not immutable but a modern rationalist invention. Numerous State and federal departments embrace regulation, business operations, education and advice – some allocate property rights as well – and have done so effectively for a century or more. The principle has two serious logical defects: system coherence can be lost; and the slicing of functions may never end as rationalists and traditionalists argue over what functions are commercialisable and what are public goods. That the delineation is variable is evidenced by the redefinition of air space control as a regulatory rather than a service function, and its hiving from ASA to CASA on 1 July 2007.

Also, the theory behind the view that implementers are mere functionaries who should be divorced from policy-makers is thin and contestable. Gerodimos (2004) examined a single public administration disaster, the saga of mad cow disease, the "biggest disaster the British government has faced - at least in the post-war era." He concluded that the response of the government at multiple levels was "inadequate", a consequence of fragmentation and lack of accountability, arising from Thatcherite reforms that sought to "diminish the centre's responsibility for managing public policy without putting an effective alternative mechanism in place." More serious than the >102 deaths from the disease was the collapse of public trust in government. Gerodimos (2004:922) said "It is remarkable that as soon as the centre regained *control* of policy enforcement the progress was impressive."

CONCLUSIONS

Measuring Safety

Normative *standards* of aviation safety exist: the protocols, codes and guidelines of ICAO. Systems can be conducive or anti-conducive to reaching those standards and so to avoiding accidents. These pre-disposing systems are resistant to quantitative summation so there is no simple, aggregate *measure* of safety. The number of occurrences is not an adequate measure but simply one of several possible indexes of the most prominent failures, viewed in hindsight (APH, 2004). There are always multiple contributing causative factors. A regime could be riddled with systemic narrow margins such as 'just in time' inventories of spare parts, tighter manning levels and outsourced maintenance, but these vulnerabilities may not yet show in the statistics.

In any case, the existence of normative technical standards does not answer critical questions about where the public interest lies: how much priority is to be given to safety over other considerations in a mixed economy and especially the national budget; who should be responsible for ensuring that the ICAO standards are implemented; and should ICAO be implemented by voluntary, market or regulatory means?

Organisational Changes

The administration of Australian aviation now is organisationally more complex. From the pre-1982 Department there are now separate entities for policy, safety regulation, air services and airports. New bodies for airspace reform and search and rescue have been mooted. Stability has suffered, policy disputes externalised and accountability fractured. The rationalist slicing of functions did not achieve even clear accountability, let alone system coherence or acceptance by the operatives who have to make the systems work.

While adequate funding is not *sufficient* to maintain a high standard of safety, it is *necessary*. Budgetary starvation can be a 'latent failure'. Deregulation can be achieved by under-resourcing the regulator as effectively as revoking legislation (Nendick, 1994:6/422). It is in the public interest to have a well-funded regulator and service provider not dependent on industry or the sales of services for its income and staffed by people whose remuneration does not contain incentives to downsize or outsource safety operations.

Undoubtedly the unleashing of commercial pressures has reduced fares, has allowed more people including working people to fly and has boosted mobility-dependent industries such as tourism. It is easy to criticise the old Department of Aviation for feather-bedding, but neither it nor the governments it served saw fiscal leanness as in the public interest: it was more concerned with safety, reliability and national development. In that it was successful, for it delivered one of the five best safety regimes in global aviation.

Governing Boards

It is inefficient and inappropriate to establish executive boards to administer core governmental functions such as regulation and policy. Safety regulation is not merely an operational matter but an exercise of sovereign coercive power.

Where an executive board is appointed, the capacity of the minister to make directions is weakened. This leaves unelected board members — who may never have held public office or may have other axes to grind — with a primary role in determining where the public interest lies.

The government's ultimate responsibility for safety cannot be delegated to proxy bodies or to industry. In any case, the ministerial prerogative to appoint carries risks of politicising the function, that is, of appointing people for their connections rather than their suitability.

The establishment of executive boards, whether enjoying regulatory powers or not, and whether commercialised or not, can be anti-conducive to the public interest, partly because the permanent public service with all its ethical traditions and never-ending preoccupation with the public interest is sidelined. Issues bubble up to the minister's office where they are more subject to the enthusiasms of the day. The boards become accountable for governing their corporation in accordance with the corporate charter, which is a crystallised product of the orthodoxy of the day. The directors are *required* to neglect the undefined and ever-changing public interest, unless the legislation or corporate charter specifically places upon them an overarching obligation to do so. A declaration as parsimonious as that in the legislation governing CASA or ASA would have been useful. An obligation to place safety as the highest priority is an inadequate substitute, because it is easy to assert that private interests are equally capable of achieving safety.

Theory of Public Sector Organisation

The neo-liberal theory of bureaucratic failure (Stigler, 1971) that animated economic deregulation in the West has been inadequate to explain how to arrange the residual regulatory affairs. Similarly, the new managerialist policy of fiscal efficiency has been inadequate for the task. This should be no surprise, for numerous scholars in public administration such as Plowden (1994) have written eloquently about the deficiencies of instrumental economic rationality and fragmented accountability.

In Australia, the energies of reformers like Smith were not steered effectively along a feasible path of institutional reform. There was no identifiable entity steering the health of the system as a whole, except perhaps the minister, who had a crushing workload and could not have been expected to act as a public sector manager. Also, there seems to have been no process for dialogue and policy analysis that participants have felt is fair. CASA has been left to heal itself.

The study has not been able to demonstrate that a public service-delivery model of safety administration is better or worse for safety than an industry-led model, partly because 'better' and 'worse' are fluid, partly because control experiments cannot be re-run, and partly because the private-sector led model has not been applied comprehensively. There has been a pervasive and narrowly conceived fiscal cost-consciousness rather than a systematic attempt to replace bureau responsibility with aviation operator responsibility.

Where Does Public Interest Lie?

Public interest in aviation safety is in practice defined by "every staff member in their own operations" (McIntyre, 2001), especially by the key decision-makers. So in turn public interest is shaped by the process and values under which key people are appointed to their positions. These have not been transparent and the language of public interest has been absent from the debate.

Managerial competence was a major factor contributing to instability during the years of reform after 1982. En route, the reforms failed at several levels: poor acceptance by stakeholders; weak forums for multi-lateral dialogue and reconciliation; fragmented accountability; clumsy executive management. These are failures of routine administration. A capable departmental Secretary and CASA CEO with a supportive CASA Chair should have been able to manage them away, even in the teeth of unrelenting fiscal pressure from the Department of Finance.

It is not possible from the material gathered to be certain whether the reforms of the post-1980 period were ultimately 'successful'. Critics of the current regime can claim that the number of near misses indicates that the system is an 'accident waiting to happen'; supporters can claim that the absence of jet fatalities shows that the regime is still working satisfactorily despite the cutting of \$100 million per year of padding from the previous budgets.

Having said that, however, three fundamental observations can be made. First, some of the internal problems *have not yet been resolved*. The 2008 Issues Paper and Green Paper and public submissions indicate that a coordinated and forward-looking air traffic policy is missing; tensions characterise the relationship between CASA and ATSB; and *after more than a decade*, the conversion of regulations to performance-based format *is still incomplete*. Was CASA's skills base eroded too much in the 1990s or is the whole notion of non-prescriptive regulation misconceived anyway?

Second, global air travel is extraordinarily safe. Internationally, safety is not politicised and is not a subject of geo-political wrangling. Governments can achieve extraordinary results if they apply collective minds to an objective that is accepted as being in the public interest of all.

Third, the instability has been fuelled by the lack of a shared understanding of whether the safety regime's customers are industry, the travelling public or the community. Until the leadership articulates a clear conception of public interest, the staff will never know whose interests they labour to serve.

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APPENDIX I: DEFINITIONS

AOPA: Aircraft Owners and Pilots Association of Australia. Its mission reads: "AOPA stands for it's [sic] members' right to fly without unnecessary restrictions and costs" (2006). Some 17,000 members.

Accident: an investigatable matter where a person on board dies or suffers serious injury, or an aircraft or any property is destroyed or seriously damaged as a result of an occurrence associated with the operation of the aircraft (*Transport Safety Investigation Act 2003*, building on ICAO Annex 13). 'Incidents' are less serious events that affect or could affect the safety of operations and indicate a failure of either control systems or flight crews. 'Occurrences' include accidents and incidents.

Air safety: "The conduct of any aircraft operation in a manner which minimises the exposure to hazards and effectively manages residual risks." (ASFA 2000). Does not include security.

Department: Collective term for the ministerial department responsible *pro tem* for aviation. At 1 January 2009, the Department of Infrastructure, Transport, Regional Development and Local Government.

DoTARS: Federal Department of Transport and Regional Services.

General aviation. Distinguished from 'regular passenger transport' (RPT). Usually includes charter, non-commercial, training and agricultural flying. Sometimes includes recreational flying.

ICAO: International Civil Aviation Organization. "A specialised agency of the United Nations... It sets common safety, security and environmental standards for all 187 contracting parties, while recognising national sovereignty over airspace." (Grayling & Bishop 2001:9).

Plane Safe: Inquiry into aviation safety by the House of Representatives Standing Committee. Report published 14 Dec. 1995.

RPT: Regular passenger transport (scheduled) services.

Safety: The probability that a flight will result in an accident. "Being safe, freedom from danger or risks" (Concise Oxford).

Direct quotes are rendered "text", and terms are highlighted as 'text'.

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