IMPLEMENTATION OF THE SYDNEY LONG TERM OPERATING PLAN (LTOP H&W)

HIGH AND WIDE FLIGHT PATHS

(LTOP H&W RECOMMENDATION 2)

"FIRST" REPORT OF TASK FORCE 2

FEBRUARY 2003

AIRSERVICES AUSTRALIA , QANTAS, SACL & "COMMUNITY" REPRESENTATIVES CO-OPTED

A SUB-COMMITTEE OF THE LTOP IMC/

Summary Critique of TF2 First Report 4 Feb 2003: 15/8/2006

by P.S . Lingard, SACF Proxy for the Mayor of Ashfield , 16 December 2005 ff.

History :

This report was sent by Airservices Australia [henceforth "ASA"] on behalf of the Chairman of the IMC (Mr. Paul Carroll) to the Minister for Transport for his approval in February 2003. A purported brief summary of the report was provided to SACF at its 35th Meeting 35 on 31 March 2003 by one Jim Ludlow (Jithadas Consultants) . A resolution is found in the minutes of that meeting "endorsing" the findings of the report, but the full report was apparently never tabled at SACF . The SACF Resolution of 31/3/2006 Stated:

> "That SACF endorses the report *"Study to Implement LTOP - High and Wide Flight Paths"* and convey its endorsement in writing to the Minister." [Proposed T. Jensen (Qantas) ; Seconded : M. Megna (Inner West Community Rep.]

The Chair of SACF , Senator Payne subsequently wrote to the Minister conveying the meeting resolution to him. That Communication was acknowledged by the then Transport Minister John Anderson as follows:

> *"I have considered the Report "Study to Implement LTOP-High and Wide Flight Paths" and have noted SACF's endorsement of it. Mr. Bernie Smith, [CEO] of [ASA] , has also written to me concerning the report and including the "IMC's " findings on the "trident" flight paths. I have replied to MR. Smith, in effect indicating to him that although the "high and wide" and "Trident" concepts for a variety of reasons are unacceptable as they are set out in the Proponent's Statement, the IMC should, in line with community and industry expectations continue to refine existing LTOP flight paths and examine any alternatives to "high and wide" and "trident" flight paths that may bring the benefits that those concepts were intended to deliver." I also took the opportunity to indicate to Mr. Smith, ... that I would expect any recommendation that all 31 recommendations of LTOP had been implemented to come from SACF, after it has considered reports and appropriate advice from IMC and other sources."*

The paper presented to SACF [SACF Doc 2003 - 046] by Mr. Ludlow contained various summary statements claiming to be outcomes of a study he had carried out at the request of "Task Force 2" (on behalf of the community). These were :

"High and Wide" would cause (as far as concern "community" impacts) :

(a) Airservices Findings:

1. ***Increased concentration of noise to North and West of the airport;***
2. ***Inhibit runway changes and reduce "noise sharing" ;***
3. ***Large increase in aircraft track miles and difficulty in sequencing aircraft;***
4. ***Significant increase in fuel burn ... and CO2 emissions from aircraft;***
5. ***Increased traffic conflictions and complexity;***

6. Restrictions on climb of departing aircraft;

(b) <u>Community Issues</u>:

1. High and Wide and Trident are <u>inextricably linked</u> to enable <u>noise sharing</u> on Runways 16L/R;
2. H&W without Trident cases unacceptable aircraft concentration [on northerly approaches] ;
3. H&W will make noise sharing mode changes difficult and may delay change;
4. Difficulties in off mode processing will further limit noise sharing modes;
5. Significant impact due departing jets maintaining low altitudes for long distances;
6. More jets landing runway 34R - Impact on Kurnell.

[Industry Findings omitted here because they depend on the correctness of Airservices alleged findings, listed above.]

(c) <u>Recommendations</u>:

1. High and wide could be implemented, but with significant deficiencies in operational efficiency, airspace complexity and detrimental impacts on Noise Sharing;
2. H&W not supported by Industry due to cost increase and CO2 emissions;
3. Community Reps do not support H&W flight paths due to;
- ***Concentration of aircraft noise***
- ***Reduction in use of noise sharing modes***
- ***Increased noise from changed departure profiles***
- ***Increased CO2 emissions.***

First the Report is fundamentally a creature of Airservies Australia , not a ***"community task force"*** . Mr. Ludlow appears merely to have summarised it for the "community." In it Airservices purports to be authorised to conduct the study by the IMC. The problems faced by the "community reps" in evaluating the report are aptly summarised by the following statement:

> ***"the community representatives on the Task Force do not consider this option, <u>as presented</u>, a viable option for implementation ... (and) ... The community is unable to provide any empirical evidence to support their case against the introduction of high and wide flight paths."***
>
> p. 28 paras 4 & 5 ff [Comment 122]
> *[Author's emphasis]*

Notably, the "community" also state that Airservices Australia ***<u>did not make any resources available</u>*** to them to test their evidence! (p. 28)

This short critique disputes the validity of the alleged findings because conclusions relating to aircraft noise , alleged separation "conflictions", flight path "concentrations" , and low altitude departure flying appear based on a false interpretation of the 1996 Airservices Reports proposing LTOP , and the subsequent Proponent Statement. The current summary critique is based on an analysis of the Full Task Force 2 Report which was only supplied to SACF by special request of the meeting held 9 June 2006 at the end of July 2006 .

The full report, but not the Ludlow report, alleges that while full LTOP Rec. 2 operations could be implemented by ASA , they would in some respects be "unsafe". Also many conclusions are supported by assertions that the resulting ***"workload for controllers"*** (eg. p. 15 S. 3.2, para2, *Comment 46*) would be increased, and /or that existing equipment is insufficiently competent (eg. *p. 14 para 2* ***"<u>Need for a Good Display method Depicting Airspace Ownership</u>",*** *Comment 37)*.

The LTOP made provision for enhanced on-shift management and staff resources (LTOP Rec. 11) , and for the supply of advanced instrumentation needed for its implementation in LTOP Rec. 8. If these are not available they are yet further LTOP Recommendations which has not been carried out.

Preliminary Critique :

Most of the serious objections to "High and Wide" in this essentially Airservices Report stem from the alleged "conclusion" that track miles and approach altitudes will be universally increased by the full implementation of LTOP Recommendation 2, that this will result in increased fuel burn costs for airlines, and emissions , including noise over residents.

The primary basis for the above stated conclusions appear fallacious for the following reasons:

1. Conclusion as to Increased Track Miles not Supported by data:

The Summary of Track Miles increases in the Table of S. 3.2 does not support the assertions of massively increased mileages as concluded, nor with independently measured mileages based on available charts and existing "LTOP" use. The data for arrival track miles in the Table in S. 3.2 , and the positioning of the offshore (north wind) arrival tracks for Mode 9 just do not support it. No comparable data for departure track mile increases/reductions are provided, ***<u>therefore the report is biassed</u>***.

2. Inadequate Runway Use and Approach Condition Analysis:

The breakdowns of alleged mileage increases under different approach conditions (ie IVA, vs. ILS, vs. PRM) in discussion of the separate LTOP Modes [Attachment 2] is not supported by any analysis of the relative frequencies of employment of the different approach methodologies (IVA, ILS, PRM etc) , nor by any consideration of the impacts of runway use frequencies on the net aggregate increase or decrease of calculated mileage. When the effect of runway use frequencies is calculated , there appears to be a net reduction of track miles with H&W of around 4%.

3. The SODPROPS Effect:

Disproportionate use is made in the track mileage analysis of the purported conclusion showing a doubling of track miles for SODPROPs, when the utilisation of the only available SODPROPs mode in present use (Mode 4) is around **<u>ONE PERCENTUM (1%) OF ALL MODE USAGE</u>**.

4. The Claim of Reduced Arrival Capacities (Table bottom p. 17, Comment 64) :

The differences quoted could hardly be considered statistically significant, if the environmental consequences for Sydney's Residents were paramount . Many of the "best" current figures quoted are in excess of 40 per hour. An arrival capacity of 40 per hour, represents half the effective "movement cap" of 80 per hour. Therefore any reduction from an arrival number greater than 40 is a move in the right direction for Sydney's environment. Also these "H&W" capacities differ from those predicted in the LTOP Reports [SABRE-SIMMOD confirmed] for Mode 10 [ie 40], which is the same as for PRM Approaches, and the average of the range for "DVAs". The figure for ILS approaches should be the same. The author of the two documents is the same , ie. "Airservices Australia."

5. Approach Track Analysis Only:

The entire analysis is conducted on the assumed basis of the effect of LTOP Rec. 2 on ***<u>approach</u>*** track miles and fuel-burn . There is no ***<u>counter-balancing discussion</u>*** of the corresponding figures for ***<u>departing</u>*** aircraft (especially jets) . Departing jets consume more fuel than approaching jets because they are carrying full fuel loads, and thus any shortening of departure tracks, or ability to reach cruising altitude more quickly, could disproportionately REDUCE THE OVERALL ROUND TRIP MILEAGE COST for any journey, as compared to the alleged costs increases stated in the report..

6. ***Separation Conflictions:***

The conclusion of increased ***"separation conflictions"*** (p. 7 Dotpoint 9 , *Comment 7*) is not based on any proper scientific analysis of the altitudes at which crossing aircraft will (or should) be during the relevant Mode operations. Also the report does not state where and how do these alleged "conflictions" occur?

Conflictions can be managed. No mention is made of the need to reduced the present high confliction rate over Sydney's inner north-west.

7. ***Increased Flight Path Concentrations:***
The conclusion of ***"increased flight path concentrations"*** only applies to aircraft on runway 16L&R & 07 approaches , and does not explain why (without Trident) the resulting flight paths need be more concentrated than those in present use.

8. Changeover Time Between LTOP Modes Affects Noise Sharing:

The conclusion that the changeover time between LTOP modes (ie "noise sharing") would be increased is patently erroneous. The alleged increase is to a total of "twenty minutes" (***p. 19 , para 5***: *Comment 81*) . The recent Airplan Review of LTOP found that the average time to changeover was of the order of twenty minutes with the airport operating under present conditions. Ergo - no increase of mode changeover time.

9. The Safety Case Requirements :

The Safety Case requirements of Proponents Statement S. 3.6. Generally this Full TF2 Report suggests that the proposed flight paths will be less safe, but admits that no Safety Case has been carried out to support this conclusion since commencement of so-called LTOP operations in July 1997.

10. Trident:

Both the Airservices and "Community" section of the report refer to an alleged requirement that the LTOP Rec. 2 requirements, including the "high and wide" (H&W) arrival paths, and the LTOP recommendation 17 ***"to refine Trident"*** are mutually dependent and inseparable to the extent that if Trident cannot be implemented then neither should the H&W. This is a contentious , completely misguided conclusion which is an utter corruption of LTOP , because Trident was always going to be difficult to implement. .

11. Military Restricted Airspace Conflicts :

The statement that Military Restricted Airspace conflicts [R495, ***p. 14 para 5,*** *Comment 40*] affect the southwest offshore approach from RIVET is incorrect. That particular Restricted PRD zone at its closest is at least 9 nmi (20 km) offshore at the latitude of Wollongong. The proposed southern offshore route in LTOP does not go anywhere near that point. Given that current arrival tracks at ca. 3-4000 ft spread out on a 6 km front well to the north of R495, the argument is merely an excuse.

A further Military exclusion zone mentioned is for the southwesterly approach via Richmond to the Runway 16L/R final approach point in Mode 10 . Even were there no possibility that this track could be shifted east to avoid any conflict, which there is, LTOP Recommendation 31 provides for ASA to enable in-principle agreements to change military airspace surrounding Sydney through the ***"Air Coordinating Committee"***.

12. Other Outstanding LTOP recommendations not implemented:

ASA says in the report that all but two of the LTOP Recommendations have been implemented, with only Rec. 2 and 17 remaining incomplete. On the contrary there are at least five (5) LTOP Recommendations remain unfulfilled:

1). ***The Military Area Discussion Requirement- Rec. 31 is subject to a confession in this report (P. 14 penult. para).***
2). ***The LTOP requirement for non-reciprocity of overflying by arriving and departing flight tracks is being honoured in the breach (P. 10 LTOPSR) - See "defacto Trident" (p.28) .***
3). ***The LTOP provision for "on-shift management of procedures and staff resource enhancement to satisfy the objectives of LTOP" (Rec. 11) is clearly unfulfilled if this Report is to be believed (P.15 S. 3.20).***
4). ***Rec. 19 Noise Abatement Departure Protocols (NADPs) not followed , despite Ministerial***

Directive of August 1998.

5). Rec. 27 -Formal Safety Analysis of entire LTOP not conducted -(p. 26, last para) . This is evident from this Report. If it had been, and the conclusions of this report are correct, then the Safety Analysis would have supported the conclusions in this report (ie H&W unsafe). .

The items in these headings could be enlarged on later , but it first seems appropriate to look at the broader (socio-legal) implications of Airservices Australia [ASA] conduct here in submitting this rejection of its own original LTOP proposals called up by the Directions of Transport Minister Sharp during 1996.

Socio-Legal Implications of H&W Rejection:

The alleged ***"findings"*** of this Full LTOP H&W report are so incongruous with all the plans, promises and hype surrounding the introduction of LTOP through 1996-97 that the suspicions of the ordinary reasonable , but sceptical man ought immediately be alerted for the following reasons:

1. ASA was the principal author of the 1996 the LTOP Reports and Recommendations (December 1996) .

2. The Findings of the Reports were supported by the independent airspace consultant "SABRE TECHNOLOGIES" using the US Federal Aviation Administration's flight path computer simulator "SIMMOD" .

3. ASA at page 11 of the LTOP (Summary) Report (1996) describes the LTOP as having two components:

    1. [The 10 proposed Modes of operation.]
    2. "new flight paths and changes to controlled airspace in the Sydney Terminal Area (within 45 nmi of the airport) by taking flight paths beyond the more densely populated areas."

    The LTOP (Summary) Report goes on:
    "The proposed modes of operation have been designed to meet the Governments objective of maximising flight paths over water and non-residential areas and achieve fairer sharing of remaining aircraft noise. The plan <u>WILL NOT COMPROMISE AVIATION SAFETY STANDARDS AND WOULD MAINTAIN THE EFFICIENCY OF THE AIRPORT.</u>"

    [LTOPSR , p.11 This author's emphasis]

If the assertions in this TF2 Report are true, ASA has been effectively misleading the public and the SACF for 10 years *[6 years at the time of publication of the instant TF2 report]* . Moreover, alternatives to options which may be *"<u>cost prohibitive</u>"* (p. 8 para 8 *<u>AIRLINES VIEWS</u>* ; *Comment 14*) for airlines, may be unduly onerous in terms of environmental amenity loss for residents, assuming that is what the LTOP was supposed to be about in airport political terms, ie . ***"Putting People First."***

Moreover, this ASA TF2 report is a confession that the LTOP , ie the remedy for the noise problem which was supposed to have been solved before commitment to the sale of the airport , ***CANNOT WORK.***

The conduct of Airservices Australia by : (1) First promoting LTOP as the solution government wanted in order to implement its *"putting people first"* policy with regard to Aircraft Noise; (2) Certifying that it would work in practice and was also safe *[See quote above, LTOPSR p. 11]* , and (3) In February 2003 , after six (6) years [now 10] reneging entirely on the plan of its own authorship, has been misleading and deceptive .

Everything that the community expected to flow from the LTOP as the solution to the noise problem at KSA: (1) The airport sale and (2) Approval of the Sydney Airport Master Plan, was based on the premise that the noise problem had in fact been solved! This assumption was also behind the decision to abandon Sydney's Second and/or new primary airport in 2002.

If verified, the issue now looks ripe for examination in terms of action under the Trade Practices Act (Misleading and Deceptive Conduct) . Moreover, the now proposed abandonment of the LTOP principles embodied in

Recommendation 2, with any proposed future alterations to the plan, also potentially brings into play the consultation requirements of Environmental Protection and Biodiversity Conservation Act [1999] .

That Airservices was aware of this problem is shown by a statement in the TF2 Report which says:

> ***"Advice from Airservices Environment Branch indicated that if Recommendation 2 could be implemented as originally directed there would be strong grounds for seeking an exemption from further environmental assessment."***
>
> *[S. 2.3, p. 12, para 3 - Comment 28]*

Conclusion:

The primary conclusion of this short preliminary study is that the increased track miles conclusion of LTOP High & Wide is not valid . The reason for this is based on the figures presented in the report, and the fact that no allowance was made for changes to departure tracks, or the runway allocation of arrival movements. When the effect of runway use frequencies is calculated , there appears to be a net reduction of track miles with H&W of around 4%.

Other claims disputed are the alleged impact on airport capacity, reduction in mode change opportiunity, flight track concentration , increased low-altitude departure flying and the tying of Trident to proceeding with LTOP.

An independent Technical Consultant , divorced in every possible way from any previous client relationship with Airservices Australia should be appointed to conduct an enquiry into the technical substance of the claims being made in this Report. Finally , if feasible, Airservices Australia must be strongly encouraged to implement the full plan, including if possible the full SODPROPs (Modes 2 & 3) , as these would bring the greatest possible noise relief to the greater part of Sydney.

A detailed commentary is available on request from the author. *"Comment"* references in the text are to this document.