



Date: April 20, 2011

Location: GTAA Administration Building, Pearson Boardrooms A & B

Chair: Toby Lennox

Attendees: Chris Fonseca, Councillor, City of Mississauga
Mark Grimes, Councillor, City of Toronto
Rick Cockfield, Region of Halton
Bill Clark, Brampton Board of Trade
Vincent Crisanti, Councillor, City of Toronto
Suresh Thakrar, City of Mississauga Resident

Regrets: Vicky Dhillon, Councillor, City of Brampton
David Albanese, Region of Peel
Dino Basso, Region of York
Heather Craig-Peddie, ACTA Ontario
David Purkis, City of Toronto Resident
Patrick O'Brien, City of Brampton Resident

Resource Members: Susan Amring, City of Mississauga
Paul Steckham, Ministry of Transportation
Pamela Laite, Tourism Toronto
Don Eastwood, City of Brampton
Henry Turner, Ministry of Tourism
Sam Ghobrial, NAV Canada
Russ Cruickshank, GTAA
Kim Stefanazzi, GTAA

Resource Members: Rob Bergevin, Transport Canada

Absent:

Next meeting: August 31, 2011

Item	Details
1.0	PRELIMINARY ITEMS – Toby Lennox
1.1	Welcome and Roll Call Meeting began at 4:05 p.m. T. Lennox called the meeting to order, and R. Cruickshank conducted the roll call.

Item	Details
1.2	Approval of Agenda Quorum was not achieved. Approval of agenda was deferred.
1.3	Review and Approval of September 1, 2010 Minutes. Quorum was not achieved. Approval of Minutes was deferred.
1.4	Matters Arising from Previous Minutes (Action Items) <u>June 2, 2010</u> <u>T. Lennox inquired if members were interested in participating in an Environmental Airside Tour of Toronto Pearson.</u> The GTAA provided a tour for members that were interested which included our stormwater and deicing facilities. Tour took place July 6, 2011 T. Lennox noted at our last CC meeting he presented the GTAA's new strategic direction which highlights Toronto Pearson as a gateway to North America. Mr. Lennox mentioned an article from an organization called FDI.com (Foreign Direct Investment) that examines the factors that make cities attractive for economic development. In the North American cities of the future, Toronto placed number four behind, New York, Chicago and Houston. There are eleven ways of generating foreign direct investment for Brampton and Mississauga: two are through internet development, three of them involve the airport, three of them involve the port, and the others involve logistics (ground transportation).
2.0	Regular Items
2.1	The Consultative Committee Update was attached to the agenda. Air traffic at Toronto Pearson is growing, and is driven by international traffic. International traffic for the first time has exceeded domestic, and is a testament to what the Toronto region has become. Transborder traffic is growing at about 8 – 10 percent. Noise complaints continue to drop fairly significantly. Approximately ten years ago, the GTAA received 8,000 complaints annually, and is now dealing with 1,100 to 1,200. The Noise 101 presentation in this meeting will explain. Toronto Pearson is about to begin its summer construction season. There is an extensive construction program which will be published on TorontoPearson.com . C. Fonseca inquired about the top five callers for Mississauga, and if there was a way of breaking it down more specifically in Mississauga. T. Lennox agreed. Mark Grimes inquired why one area is designated as Toronto/South Etobicoke. T. Lennox indicated that it's been traditional to divide it up that way because there are

Item	Details
	<p>certain operations that are south of the airport because of flight approaches.</p> <p>Mark Grimes asked if the GTAA receives a lot of complaints from South Etobicoke. T. Lennox referred to the impending Noise 101 presentation.</p> <p>C. Fonseca requested a copy of forecast projections up to 2015 for Toronto Pearson based on an earlier presentation.</p> <p>T. Lennox noted that the forecast for 2015 is approximately 38 – 40 million passengers at Toronto Pearson, and confirmed the information will be provided.</p>

3.0 Discussion Items

3.1 Noise 101

T. Lennox stated that one of the topics that members of the Consultative Committee members wanted to discuss in 2011 was noise.

Aircraft noise is a very personal, individual reaction to noise created by an aircraft on take-off or landing. Aircraft generate a particular reaction from people that is unlike any reaction to similar non-aircraft noise levels. The reasons are volume, persistence and repetition, pitch of noise, aluminum overcast (which is an awareness of the aircraft itself) emissions, and urban issues.

Common noise levels are:

- Vacuum at 10 feet – 70 dBA
- Busy street corner – 90 dBA
- A320 arrival 2 nm from runway - 75 dBA
- B727 departure 2 nm from runway – 80 dBA

Awareness of noise is often triggered by changes in the individual's situation eg. working from home as opposed to working from an office.

The noise complaints have decreased; in 1998 there were 7,756 complaints and in 2010 there were 1,245. Noise complaints have moved around. Currently there are more complaints in the Yonge and Lawrence neighbourhood. The top five callers dominate the number of calls.

The GTAA manage noise and recognizes it's a constant byproduct of aircraft operations. There is limited ability to change flight operations to minimize noise further due to safety requirements.

Item	Details
	<p>The GTAA is mandated by ground lease to deal with noise issues within a ten nautical mile radius from the airport. It is required to establish and maintain a noise committee, and to set noise abatement procedures (hours of operation, preferential runways, limitations on engine maintenance run-ups) which may be changed without the approval of Transport Canada.</p>
	<p>The GTAA also monitors activity, investigates violations of noise abatement procedures and makes recommendations to Transport Canada for enforcement.</p>
	<p>NAV Canada operates and manages airspace and guides aircraft to and from Toronto Pearson. NAV Canada sets capacity limits for airspace and establishes flight paths for Toronto Pearson, and is also obliged to operate airspace in an efficient and safe manner.</p>
	<p>However, Transport Canada is the ultimate regulator of aviation in Canada including setting regulations in respect of “noise emanating from aerodromes and aircraft”. TC approves and publishes flight paths and procedures, and enforces violations of noise abatement procedures.</p>
	<p>Transport Canada also set recommendations for land use in the vicinity of airports. Recommendations are then included in provincial land use guidelines.</p>
	<p>The municipalities then set land use policies based upon those provincial guidelines. The municipalities also receive complaints from constituents.</p>
	<p>Sam Ghobrial noted there are approximately 1200 aircraft movements per day at Toronto Pearson.</p>
	<p>For departures, a noise abatement procedure requires jet aircraft to climb to an altitude of 3,600 feet above sea level (ASL) before turning to their enroute destination. During the day (7a.m. – 11a.m) propeller aircraft climb to an altitude of 1,100 feet ASL before turning. At night (11pm – 7am) prop aircraft must follow the same departure procedure as jet aircraft.</p>
	<p>The noise abatement procedures for arrivals require at least 3000 ASL until intercepting the final approach, fix, and then remain on or above a three degree glideslope.</p>
	<p>The GTAA receive some noise concerns in the area of Yonge and Lawrence during the downwind leg of the approach when the aircraft are turning for landing on Runways 23, 24L or 24R.</p>
	<p>The GTAA works with the provincial and municipal governments to limit new development or redevelopment in noise impacted areas of Peel, Mississauga, Brampton and Toronto. Development areas are based on recommendations from Transport Canada using something called the Noise Exposure Forecast (NEF) model. It projects a contour on a map, it is not a measure of noise but a metric of response to noise.</p>

Item	Details
	<p>A nighttime flight at Toronto Pearson counts sixteen times more than a daytime flight in this model. The airport operating area restricts development within 30 NEF contour.</p> <p>The GTAA monitors every flight that flies to and from Toronto Pearson. There are enforcement investigations, and if there is a violation there are fines imposed by Transport Canada on the air carrier and on the pilot.</p> <p>The GTAA tries to assist people in understanding why noise occurs, and why it happens in their neighbourhoods. The GTAA works with the local politicians and representatives to make sure we are addressing their needs. We will work the community to investigate and pursue any potential changes to airport operations to minimize noise, and have indeed had success in this area. An example of this success was the conversion by Fed Ex of aircraft from noisier 727's to quieter 757's.</p> <p>Night operations at Toronto Pearson are restricted between 12:30 a.m. and 6:30 a.m. and no Chapter 2 aircraft are allowed to fly during this time period. The GTAA have a letter agreement with TC that governs the number of operations at Toronto Pearson. In 2010 – 2011, we have been budgeted to 13,207 operations. This includes all flights: if it's medical, mechanical, or a diversion it still counts against the budget.</p> <p>There will be growth in traffic, and an increase in noise on the community. There are also far more efficient and quieter aircraft like the 787 and 777, and that should help mitigate noise concerns.</p> <p>M. Grimes inquired if the noise complaints from the Billy Bishop Island Airport are included in the Toronto Pearson complaints from Southern Etobicoke. T. Lennox responded in the negative as Toronto Pearson does not operate that airport.</p> <p>M. Grimes asked if it is Transport Canada or GTAA that opposes development around the airport. T. Lennox responded it is the GTAA and we have a planning department where questions about locations of a home or development are reviewed.</p> <p>C. Fonseca inquired if the noise warning signs in neighbourhoods are a by-law. T. Lennox responded the noise warning signs were installed as part of a site plan approval.</p> <p>C. Fonseca asked if the noise warning signs are only put up for a certain time period for newer developments. T. Lennox responded in the affirmative.</p> <p>V. Crisanti inquired if there was a block out period in the evening at Toronto Pearson where there aren't any flights. T. Lennox responded that Toronto Pearson is a 24 hour airport, there are restricted operations from 12:30 a.m. to 6:30 a.m., and Chapter 2 aircraft are not allowed to fly during restricted hours. He reminded all that Toronto Pearson cannot shut down as it handles one third of Canada's air traffic, there is also a demand for air travel during the night hours, and a requirement to accommodate</p>

Item	Details
	<p>medical emergencies and weather diversions.</p> <p>C. Fonseca noted that out of Toronto Pearson's 13,000 flights, approximately 10% are emergencies, and inquired if the GTAA could provide a breakdown of the different flights. T. Lennox responded in the affirmative.</p> <p>C. Fonseca asked how many employees work during the night time operations. T. Lennox responded they don't quite correlate as Toronto Pearson has a big bank of aircraft that are getting ready to leave between 4:00 a.m. and 8:00 a.m. in the morning.</p>

3.2 Changes in Engine Technology and its Impacts on Air and Noise Emissions

R. McGill gave an overview on how aviation standards are governed and how environmental improvements are made.

Aviation standards are handled by the International Civil Aviation Authority (ICAO). International Civil Aviation Authority governs aviation, individual states generally adopt standards. The ICAO Committee on Aviation Environmental Protection (CAEP) addresses aircraft air and noise emissions, as well as GHGs (greenhouse gases) internationally. The UN-FCCC United Nations Framework Convention on Climate Change governs climate change and GHG reduction internationally with the acceptance of aviation and marine.

The aviation industry is taking a balanced approach when looking at environmental improvements and CENAC has its role.

- Technological approach
- Operational efficiency
- Infrastructure improvements
- Economic measures

Over the past 40 years, aircraft have become 70% more fuel efficient. Traffic growth is 5% annually while CO₂ growth is 3%. The Boeing 787 will use 20% less fuel per passenger than airplanes in the sky today. The 787 will also have a noise footprint that is 60% smaller than competing airplanes.

The new high bypass engines will provide up to 16% percent lower fuel consumption and a 75 percent reduction in noise footprint and will be coming in by 2016.

The geared turbofan will offer around a 15-20% fuel improvement and 20dba noise reduction (400%) will be coming in by 2013.

The Open Rotor will offer 25-30% fuel improvements and will meet Chapter 3 requirements by 2020.

Item	Details
	<p>The Chapter 2-compliant aircraft completed their operational phase out in April 2002. Chapter 3 standards are more stringent and are now in effect. Chapter 4 standards apply to newly certified aircraft as of January 1, 2006. This improves on the existing Chapter 3 standards by a cumulative margin of 10 dBa.</p> <p>There was a noise study conducted five years ago and 35 percent of the noise complaints came from 3 percent of our aircraft. The 3 percent of aircraft were the hush-kitted ones that are disappearing from North American skies.</p> <p>There is a focus to enhance technology, reduce weight, friction, and increase engine efficiency, and reduce operational time and distance.</p> <p>The airlines could receive their biggest greenhouse reductions using biofuels in aircraft, and there would be up to an 80% reduction in CO2. In 2020, they are trying to get 15% of aircraft to use biofuels.</p> <p>The Intergovernmental Panel on climate change estimates up to 18% of all aviation fuel is wasted as a result of inefficient infrastructure and operations.</p> <p>NAV Canada estimated fuel cost savings and emissions reductions from 1996 – 2016 projected to be \$4.3 billion and 13.4 million tonnes of GHG emissions. Shortening flying times by a minute saves at least 100kg of CO2 per flight. By 2050, airlines committed to halving net emissions based on 2005 levels, and the early turn procedures.</p> <p>In infrastructure improvements, the GTAA established the 2020 GHG reduction policy looking to reduce emissions by 20% by 2020. The GTAA has already reduced electrical consumption by 7%, now operates over 100 electric vehicles, monitors aircraft operations, has CENAC and Noise Abatement procedures in place, makes continuous operational improvements, and has developed land use – operating area.</p> <p>In terms of economic measures, airlines have agreed to 1.5% efficiency improvement per year until 2020. They are capping emissions growth from aviation by 2020 and are halving net emissions based on 2005 levels by 2050.</p>
4.	<p>Members Update</p> <p>B. Clark indicated that there are a lot of vehicles standing by on shoulders of the roadways leading in and out of Toronto Pearson. A lot of people are not aware of the Cell phone lot as it is very poorly signed and many people cannot find it. Parking enforcement is not being kept up on the roadways, and as a driver, Mr. Clark felt it was very distracting.</p> <p>T. Lennox commented that the GTAA have talked to Peel Regional Police to try and</p>

Item	Details
	enforce parking as it is a safety concern. The cell phone parking lot is not well signed, and the GTAA is following up on this issue.
5.	Public Comments
	There were no comments from the public as there was only one member from the public present at the meeting.
6.	Adjournment
	The meeting was adjourned. The next CC meeting is scheduled for Wednesday, August 31, 2011 at 3111 Convair Drive, Pearson Rooms A & B.

Minutes prepared by Kim Stefanazzi, (416) 776-3941, kim.stefanazzi@GTAA.com. Any errors or omissions in these minutes should be forwarded to the author immediately.