The active freighter fleet remained stable over the past year, with a small decline of 16 units. The majority of new deliveries of production freighters and passenger-to-freighter conversions simply replaced aircraft that were parked and retired. The development over the past year in the fleets of widebody, narrowbody and turboprop freighter aircraft are analysed here.

Annual freighter fleet development

The number of freighters on the global fleet remained relatively constant over the past year. There was a small decline from 2,133 active units in June 2011 to 2,117 active units in June 2012, reflecting the zero-growth in the industry.

There were a total of 166 additions, over the past year, comprising: 52 deliveries of factory-built freighters (all widebodies); 46 aircraft re-activated from storage; and 68 passenger-to-freighter conversions. A total of 267 reductions were accounted for by 158 freighters being parked, 104 being retired (mostly older types), and five being destroyed *(see table, page 79)*. Only 19 of the retired aircraft came from the active fleet; the rest were retired from the parked fleet.

Different types of freighter fleets are compared here in the year from 1 June 2011. The freighter fleet is sub-divided into three categories: widebodies; narrowbodies; and turboprops *(see table, page 79)*.

Widebodies

The widebody freighter fleet comprises current factory-production aircraft, converted aircraft, and several older types that are no longer in production and have no passenger-to-freighter conversions left available.

Current-production aircraft include the A330-200F, 747-8F, 767-300ERF, and the 777F. Passenger-to-freighter conversions on widebody aircraft are currently available on the A300-600, 747-400, 767-200/-300 and the MD-11.

Other older widebody freighters not in production and with no conversions available include the A310, 747 'Classics' (-100/-200/-300), DC-10, and L1011.

In total, the entire widebody freighter fleet experienced a net increase of six active units from 991 in June 2011 to 997 in June 2012 *(see table, page 79)*.

52 new factory-built aircraft were delivered, with 19 re-activations from storage, and 19 passenger-to-freighter conversions. Reductions included 79 aircraft parked, 38 retirements, and one aircraft destroyed *(see table, page 79)*.

The total widebody freighter fleet has therefore remained almost constant over the past year, with a net increase of six units in active aircraft.

A300

The A300 freighter fleet can be divided into the older A300s, comprising: the A300-B4F/-C4F/-F4F variants; and the newer A300-600F/-RF.

The A300-B4F/-C4F/-F4F fleet shrank by six active aircraft to 34 in June 2012. One aircraft was re-activated from storage, but six were put into storage and seven were retired *(see table, page 79)*.

Midex Airlines parked three, European Air Transport two, and MNG Airlines one. Five of the seven aircraft retired were owned and operated by DHL Express, one by ACT Airlines, and one by European Air Transport (EAT).

The largest fleet of active A300-B4F/-C4F/-F4Fs is operated by EAT, which has 10 aircraft. The A300-B4F/-C4F/-F4F is operated in smaller numbers by several carriers, including: ACT Airlines, AeroUnion, and ULS Airlines Cargo.

The A300-600F/-RF fleet had a net increase of eight units. This was due to 10 passenger-to-freighter conversions, and one re-activation from storage. Three aircraft were parked *(see table, page 79)*.

Five conversions went to EAT, three to Maximus Air Cargo, and two to Rus Aviation. MyCargo re-activated one. EAT parked one aircraft, as did Air Macau, and Air Atlanta Icelandic.

In June 2012, therefore, there were 159 active A300-600F/-RFs *(see table, page 79)*. The largest fleets were operated by FedEx (71 aircraft), and United Parcel Service (UPS) (53). This means that almost the entire A300 freighter fleet is in service with express carriers. Other carriers operate A300-600F/-RFs in smaller numbers, including Air Hong Kong, Maximus Air Cargo, and EAT.

The backlog for A300-600F/-RF conversions stands at 13 aircraft, all to be converted by EFW, with the majority of this backlog (11) going to DHL.

A310

The A310 freighter fleet is in decline. The active fleet of 52 reduced to 47 in June 2012 (23 A310-200Fs, and 24 -300Fs) *(see table, page 79)*.

FedEx parked six A310-200Fs and two -300Fs. Another two A310-300Fs were parked after Deccan 360 ceased operations. Services Air re-activated one A310-300F.

FedEx is the dominant operator of A310 freighters, with 23 A310-200Fs and 15 A310-300Fs in active service in June 2012. Others are operated by Turkish Airlines, ULS Airlines Cargo, Royal Jordanian and Services Air.

A330

The A330-200F is a small fleet, with 11 in operation in June 2012; an increase of seven over the year *(see table, page 79)*. Four of these were delivered to Malaysia Airlines, one to Turkish Airlines, and one to Hong Kong Airlines.

Active A330-200Fs are operated by Malaysia Airlines, Turkish Airlines and

FREIGHTER FLEETS FROM 01/06/2011 TO 01/06/2012

Aircraft	June 2011			Additions			Reductions			June 2012			Orders
type	Active	Parked	Backlog	Deliv.	Re-activated	Frtr conv	Parked	Retired	Destroyed	Active	Parked	Backlog	in past year
Widebodies													
A300B4F/C4F/F4F	40	19			1		6	7		34	18		
A300-600F/RF	151	1	25*		1	10	3			159	3	13*	
A310-200F	29	9					6			23	15		
A310-300F	27	5			1		4			24	8		
A330-200F	5		52	6						11		39	-7
747F Classics	63	63			3		17	21		47	58		
747-400F	124						3		1	120	3		
747-400ERF	38	2			1		6			33	7		
747-400 Combi	29									29			
747-400BCF	43		5*			4	3			44	3	1*	
747-400BDSF	21	1	6&		1	4	1			25	1	2*	
747-8F			75	15			1			14	1	54	-6
767-200ERF	4									4			
767-200SF	22									22			
767-200BDSF	29	5			5		4			30	4		
767-300ERF	60	1	23	10	1					71		40	27
767-300BCF	7									7			
767-300BDSF	4	1	4*		1	1	1			5	1	3*	
777F	38		49	21						59		65	37
DC-10-10F		4						1			3		
DC-10-30F/30CF	11	17			2		5	9		7	12		
DC-10-40F	2	1					2				3		
MD-10-10F	56	2					5			51	7		
MD-10-30F	17									17			
MD-11F	171	2			2		12			161	12		
L1011F		2									2		
Widebody Total	**991**	**135**	**239**	**52**	**19**	**19**	**79**	**38**	**1**	**997**	**161**	**217**	**51**
Narrowbodies													
BAe 146F	25	1					3			22	4		
CRJ200F	4					1				5			
707/720F	2	13						4		2	9		
727-100F	12	6						2		12	4		
727-200F	180	70			5		25	29		147	74		
737-200F	19	2					7			12	9		
737-200C	26	12			4		3	2	1	26	9		
737-300SF Pemco	28	5	3*		3	3				34	2	3*	3*
737-300SF AEI	13		1*			1				14			
737-300BDSF	37									37			
737-300QC	36	1			1					37			
737-400SF Pemco	3		4*			2	1			4	1	4*	2*
737-400SF AEI	5		12*			2				7		10*	
737-400BDSF	8		5*			4	2			10	2	1	
737-400C	5					1				6			
757-200PF	79									79			
757-200SF	71		44			19	2			88	2	25	
757-200PCF	21	9	9			6	2			25	10	7	4
DC-8-60F	16	17			1		2	6		15	12		
DC-8-70F	21	20					13	5		8	28		
DC-9-15F	7	5					1	1		6	5		
DC-9-30F	8	14			1			1		9	12		
DC-9-30QC	4									4			
DC-9-40F		25						4			21		
MD-80F			15				1				1	14	
Narrowbody total	**630**	**200**	**93**		**15**	**39**	**62**	**54**	**1**	**609**	**205**	**64**	**9**
Turboprops													
ATR42 (F)	48	1			1	1		1		49			
ATR72 (F)	43	2				5	1			47	3		
Bae ATP (F)	33	9			1		1			33	9		
Convair 580/640 (F)	34	12			2			1	2	34	9		
EMB110 (F)	13	10			1					14	9		
EMB120 (F)	27	2								27	2		
Fairchild Metro (F)	140	11			3	2	5	3		140	10		
F-27 (F)	23	12			2		3	3		21	11		
Fokker 50F	11	2				1				12	2		
HS 748 (F)	16	7					3			13	10		
HS 748 Combi	5	1								5	1		
L-100 Hercules	35	6					1	1		33	7		
L-188 Electra (F)	4	8						1	1	3	7		
Saab 340F	35	4			1	1	1			36	4		
Short Skyvan (F)	4	3								4	3		
Short 330 (F)	10	3			1			1		11	1		
Short 360 (F)	31	3					2	1		29	4		
Turboprop total	**512**	**96**			**12**	**10**	**17**	**12**	**3**	**511**	**92**		
Fleet total	**2,133**	**431**	**332**	**52**	**46**	**68**	**158**	**104**	**5**	**2,117**	**458**	**281**	**60**

Source: ACAS, Fortune Aviation, & ACMG
*Note: Backlogs for passenger-to-conversions are approximate

The A300B4F/C4F fleet continues to decline. Besides EAT, the other active aircraft in the fleet are operated in small numbers by a variety of carriers.

Etihad Airways. There is an order backlog of 39 aircraft, from: Intrepid Aviation Group (14); Matlin-Patterson Global (6), Yangtze River Express (5), TAMPA (4), MNG Airlines (4), Turkish Airlines (3), Etihad Airways (2) and Sichuan Airlines (1).

Orders for seven A330-200Fs from Avion Aircraft Trading were cancelled in the year to June 2012.

747 Classics

The 747 Classic freighter fleet declined by 16 units to 47 *(see table, page 79)*. A large number are now parked.

The fleet includes a variety of variants such as the 747-100F, -200F, -200FM, -200C, -300F, and -300FM.

The fleet decline was due to 17 aircraft being parked, and two retirements. A further 19 aircraft were retired from storage *(see table, page 79)*.

The -200F is the most common type (21 active aircraft), and 747-200FM (20). The largest operators are Kalitta Air (six 747-200Fs, eight 747-200FMs), Southern Air (three 747-200Fs, four 747-200FMs), and Evergreen International (one 747-200F, four 747-200FMs).

747-400

Several different types make up the 747-400 freighter fleet. This includes the factory-built 747-400F, -400ERF and 747-400 Combi. The combined fleet of these three types overall declined by nine units during the year.

Passenger-to-freighter conversions are also currently available for the 747-400, carried out by Boeing (designated 747-400BCF), and IAI Bedek (designated 747-400BDSF). The number of converted freighters increased by five aircraft.

The 747-400F fleet declined by four to 120 in June 2012 *(see table, page 79)*. Three aircraft were parked by China Airlines Grandstar Cargo. One Asiana Airlines aircraft was destroyed.

The largest -400F fleets are operated by China Airlines, Atlas Air, UPS, Singapore Airlines Cargo, Cargolux, Korean Air, Nippon Cargo Airlines, Polar Air Cargo, Cathay Pacific and several smaller operators.

The -400ERF fleet also declined, by five, to 33 in June 2012 *(see table, page 79)*. Six aircraft were parked in this time, all by Jade Cargo International, which ceased operations. One parked aircraft was re-activated, and transferred from LoadAir Cargo to Kalitta Air.

The operators of 747-400ERFs are Korean Air, Cathay Pacific, China Cargo Airlines, AirBridge Cargo, TNT Airways, Martinair, Air France and Kalitta Air.

The 747-400 combi fleet has remained unchanged over the past year, with 29 active aircraft, of which 16 are operated by KLM, five by Air China, four by Eva Air, two by Asiana Airlines, and one each for Cargolux and UPS.

The Boeing-converted -400 fleet (-400BCF) increased by one *(see table, page 79)*. Four conversions were completed and delivered to SIA Cargo and Thai Airways International. Three aircraft were parked, however, by Cathay Pacific and Korean Air.

Operators of -400BCFs are Korean Air, Kalitta Air, Air China Cargo, Cathay Pacific, National Airlines, Air Hong Kong, Atlas Air, SIA Cargo, Thai Airways International, Air Cargo Germany, Martinair, UPS, Air Atlanta Icelandic, China Cargo Airlines and Cargolux.

There is a backlog of just one unit for 747-400BCF conversions.

The IAI Bedek-converted 747-400BDSF fleet comprises 25 aircraft; an increase of four over the year. This was due to four converted aircraft delivered to MyCargo Airlines, and Southern Air.

One aircraft was re-activated from storage by Yangtze River Express. MyCargo Airlines parked one.

747-400BDSFs are operated by Eva Air, Asiana Airlines, Air Cargo Germany, Yangtze River Express, World Airways, Southern Air, Air China Cargo, Air Atlanta Icelandic, Evergreen International and MyCargo Airlines.

747-8

The 747-8F is the newest 747 freighter, with 15 deliveries made by June 2012 to Cathay Pacific, Global Supply Systems, Cargolux, AirBridge Cargo, Korean Air, and Atlas Air.

There is a firm order backlog of 54 aircraft *(see table, page 79)*, destined for Nippon Cargo Airlines, Emirates, Cargolux, Korean Air, Atlas Air, Cathay Pacific, AirBridge Cargo, and GECAS.

767

The 767 freighter fleet comprises factory-built and converted aircraft.

The smaller 767-200 fleet consists only of conversions, carried out by: Boeing, designated the 767-200SF and 767-200ERF; and IAI Bedek, designated the 767-200BDSF.

The 767-200SF and 767-200ERF fleets did not change from June 2011 to June 2012, with a total of 26 active aircraft *(see table, page 79)*.

The operators of 767-200SFs are Star Air, Air Transport International, Amerijet International, Cargojet Airways, First Air, and ABX Air. TAMPA, of Colombia, operates the four 767-200ERFs

The 767-200BDSF fleet increased by one over the past year. Five aircraft were re-activated from storage: three by ABX Air, and two by Rio Linhas Aereas.

The larger 767-300 freighter fleet consists of factory-built 767-300ERFs, and aircraft converted by Boeing (designated 767-300BCF), and IAI Bedek, (designated 767-300BDSF).

The 747-8F accounted for more deliveries between June 2011 and June 2012 than any other freighter type. There is a firm order backlog of 54 for the aircraft.

The 767-300ERF fleet increased by 11 to 71 in June 2012 *(see table, page 79)*, due to the delivery of 10 new aircraft (nine to UPS and one to Silk Way Airlines) and a re-activation by TAMPA.

The largest fleet of 767-300ERFs is with UPS (50). Several other operators have smaller fleets, including: DHL Air, LAN Cargo, MAS Air Cargo, ABSA Cargo, All Nippon Airways (ANA), Linea Aerea Carguera Colombia, Florida West, Asiana Airlines, Express Freighters Australia, TAMPA and Silk Way Airlines.

The backlog for 767-300ERF aircraft stands at 40, of which 27 are due for delivery to FedEx, nine to UPS, three to DHL, and one to Azerbaijan Airlines.

The 767-300BCF fleet remained unchanged over the past year, with seven active examples, all with ANA.

The 767-300BDSF fleet increased by one active unit over the past year *(see table, page 79)*. One aircraft was converted, and delivered to Air Transport International on operating lease from Cargo Aircraft Management, while Air Transport International also re-activated one aircraft.

One 767-300BDSF was parked, however, by Gestair Cargo, before being transferred to ABX Air.

IAI Bedek has a backlog of three 767-300ERs for freighter conversion.

777

The only variant of the 777 freighter currently available is the factory-built 777F, using the fuselage of the 777-200.

The active fleet increased by 21 units to 59 in June 2012 *(see table, page 79)*. These were all new deliveries to FedEx (7 aircraft), TNT Airways (3), China Cargo Airlines (2), Emirates (2), Southern Air (2), Qatar Airways (2), China Southern Airlines (1), Etihad Airways (1) and Korean Air (1).

The active 777F fleet is operated by FedEx (19), AeroLogic (8), China Cargo Airlines (6), China Southern Airlines (6), Emirates (4), Qatar Airways (4), Southern Air (4), TNT Airways (3), LAN Cargo (2), Air France (1), Etihad Airways (1) and Korean Air (1).

A total of 65 777Fs remain in the backlog, with 37 new orders placed over the last year *(see table, page 79)*.

The operators of these aircraft will be FedEx (13), Emirates (9), Cathay Pacific (8), China Southern Airlines (6), Hong Kong Airlines (6), Lufthansa Cargo (5), Qatar Airways (4), Korean Air (4), Ethiopian Airlines (4), Etihad Airways (2) and LAN Cargo (2). Two aircraft are for undisclosed operators.

Orders were placed in the last year by Cathay Pacific (8), Hong Kong Airlines (6), China Southern Airlines (6), Emirates (5), Ethiopian Airlines (4), FedEx (3), Etihad Airways (2), Qatar Airways (2), and an undisclosed operator (1).

DC-10

The DC-10 freighter fleet is one of the oldest widebody freighter types still in service. By June 2012, the fleet of active DC-10-30Fs had declined to seven, a reduction of four *(see table, page 79)*.

These seven aircraft are with Kelowna Flightcraft (4), TAB Airlines (1), Cielos Airlines (1) and Avient Aviation (1).

Five active DC-10-30Fs were parked during the past year, including three by Cielos Airlines, and two by Master Top Linhas Aereas (which also retired one aircraft). Deta Air of Kazakhstan also retired two DC-10-40Fs.

The DC-10 also underwent conversion to MD-10 designation (MD-10-10F and -30F) for FedEx.

The MD-10-10F fleet declined by five active aircraft over the past year, which were parked by FedEx *(see table, page 79)*. FedEx still has 51 -10Fs in service. FedEx is also the only operator of MD-10-30Fs. The fleet remained unchanged over the past year, with 17 aircraft in active service.

MD-11

The MD-11F fleet decreased by 10 active units over the past year to 161 *(see table, page 79)*.

Twelve aircraft were parked: five by World Airways, three by CargoItalia, one by Martinair, one by FedEx, one by Shanghai Airlines Cargo, and one by Eva Air. FedEx re-activated two from storage.

FedEx is the dominant MD-11F operator, with 63 in service. Other MD-11F operators are UPS (38), Lufthansa Cargo (18), Eva Air (7), Sky Lease Cargo (6), Martinair (6), Centurion Air Cargo (4), Saudia (4), World Airways (4), Aeroflot Russian Airlines (3), China Cargo Airlines (3), Ethiopian Airlines (2), Nordic Global Airlines (2), and Avient Aviation (1).

Narrowbodies

The narrowbody freighter fleet saw a net decline of 29 aircraft during the year, as 62 aircraft were parked, 54 were retired, and one aircraft was destroyed.

Over the last year, 39 narrowbody freighter conversions were carried out , with 15 aircraft re-activated from storage *(see table, page 79)*.

A significant number of the narrowbody freighter reductions were caused by large retirements in the 727 and DC-8 freighter fleet.

The main additions to the narrowbody freighter fleet were passenger-to-freighter conversions of 757s and 737-300s/-400s.

The fleet consists almost entirely of Boeing and McDonnell Douglas aircraft: the 707/720, 727 (-100/-200), 737 (-200/-300/-400), 757 (-200), DC-8, DC-9, and MD-80. There are also small fleets of BAe 146Fs and CRJ200Fs.

There are no narrowbody production freighters available.

Passenger-to-freighter conversions are available for the 737-300 and -400, 757-200s, and MD-80.

727

The 727 freighter fleet declined by 33 over the past year. Many operators have opted to replace them with 737 Classics and 757s.

The 727-100F fleet remained constant over the past year, at just 12 active aircraft with 12 different carriers.

The 727-200F fleet reduced by 33 to 147 active aircraft: 25 aircraft were parked (14 by FedEx, and 11 by other operators), and a further 13 were retired *(see table, page 79)*. The retirements included 11 by FedEx, and two by Capital Cargo International Airlines

A further 16 aircraft were retired from parked, and five were re-activated.

The largest operators of 727-200Fs are FedEx (40 aircraft), Kelowna Flightcraft (12), Cargojet Airways (8), Capital Cargo International Airlines (8) and Transmile Air Services (7).

737

The 737 freighter fleet consists of the older 737-200 models, and younger 737-300s and -400 models.

Both the 737-300 and -400 models are still available for conversion by Pemco and AEI, both designated 737-300SF/-400SF; and IAI Bedek, designated 737-300BDSF/-400BDSF.

The 737-200F fleet can be sub-divided between the freighter-only -200F fleet and the convertible -200C. The 737-200F fleet reduced by seven active units *(see table, page 79)*, as Air India put five into storage, and Blue Dart Aviation two.

The remaining 12 active 737-200Fs are operated by Northern Air Cargo (3), Star Air Cargo (3), South African Cargo (2), Transmile Air Services (2), Blue Dart Aviation (1), and Aerosucre Colombia (1).

The 737-200C fleet remained constant over the past year at 26 active aircraft *(see table, page 79)*, although there were a number of changes to the fleet. Four aircraft were re-activated from storage, three were parked, one was destroyed, and two GTRA Airways examples were retired from storage.

The largest fleets of 737-200Cs are with Aloha Air Cargo (4 aircraft), and Nolinor Aviation (3), with multiple other carriers operating a single aircraft.

The 737-300SF fleet converted by Pemco increased by six active units over the past year *(see table, page 79)*. Three aircraft were re-activated, while three were converted to freighter. Pemco, meanwhile, entered Chapter 11 bankruptcy protection in March 2012.

Conversions were delivered to CDI Cargo Airlines, Hainan Airlines, and SF Airlines.

The 737-300SF fleet converted by AEI increased by one aircraft, for Cargo Air.

The 737-300BDSF fleet remained unchanged over the past year with 37 active examples *(see table, page 79)*.

The largest 737-300F operators are China Postal Airlines (8), Donghai Airlines (7), Yangtze River Express (6), Bluebird Cargo (6), Airwork (5) and TNT Airways (5). There are several other smaller operators.

Pemco, AEI, and IAI also perform conversions for the 737-400 aircraft.

The Pemco-converted 737-400 fleet increased by one, with two conversions and one aircraft put into storage *(see table, page 79)*.

AEI also performed two conversions over the past year to increase the fleet from five to seven aircraft *(see table, page 79)*.

IAI converted four 737-400 aircraft, with two aircraft parked, taking the 737-400BDSF fleet to 10 active examples *(see table, page 79)*.

737-400 operators include: TNT Airways (8), China Postal Airlines (6), MNG Airlines (1), Bluebird Cargo (1), AlbaStar (1), Alaska Airlines (1), Solinair (1) and Toll Priority (1).

The 737-300QC convertible fleet increased by one aircraft (re-activated from storage) over the past year, to give a total of 37 active aircraft.

Pemco has converted all of these aircraft, except for seven from IAI. These are operated by Europe Airpost (14), Jet2 (7), Yangtze River Express (4), Titan Airways (3), Mistral Air (3), Jet Time (2), China Postal Airlines (1), Channel Express (1) and Safair (1).

The 737-400C fleet is smaller than its -300QC counterpart. It increased by one to six *(see table, page 79)*, with a conversion for Safair.

757

The 757 freighter fleet can be divided into three categories: production freighters (designated 757-200PF); Precision-converted freighters (the 757-200PCF); and ST Aero/Pemco-converted freighters (the 757-200SF).

The active 757 freighter fleet increased by 21 units during the year.

A total of 80 production 757-200PF aircraft were built, with 79 still in active service *(see table, page 79)*, 75 of them with UPS. Yakutia, Ethiopian Airlines, European Air Transport, and Icelandair Cargo each operate one aircraft.

The Precision-converted 757-200PCF fleet increased by four *(see table, page 79)*. Six conversions were carried out in the past year: two for SF Airlines, and one each for EAT, National Airlines, TNT Airways, and Cargo Aircraft Management.

Two 757-200PCF aircraft have been parked over the past year: one following the demise of VarigLog, and the second by Icelandair Cargo.

Precision has a backlog of seven aircraft to convert over the next year.

Active 757-200PCFs are with SF Airlines (5), DHL (5), Icelandair Cargo (3), Blue Dart Aviation (2), Capital Cargo International Airlines (2), China Cargo Airlines (2), Gestair Cargo (2), Cargojet Airways (1), Ethiopian Airlines (1), DHL-Tasman Air (1) and TNT Airways (1).

The 757-200SF fleet of 88 aircraft has mostly been converted by ST Aero, with Pemco converting only one.

The past year saw 19 conversions carried out, all for FedEx, bringing the

The A330-200F is now operated in appreciable numbers. There are 39 firm orders outstanding for the type, making it the third most popular in-production freighter after the 747-8F and 777F.

total FedEx fleet of 757-200SFs to 49. DHL is the second largest operator with 22 aircraft, followed by EAT (10), Morningstar Air Express (5) and Blue Dart Aviation (2).

ST Aero has a conversion backlog of 25, mostly for FedEx.

DC-8

The DC-8 freighter fleet can be split into two categories: the DC-8-60F variants, with the original Pratt & Whitney JT3D engines; and the DC-8-70F variants, which were re-engined with CFM56-2 engines. The active fleet declined by 23 over the year.

A total of 15 DC-8-60Fs remain in active service *(see table, page 79)*.

The DC-8-70F fleet has declined faster, with just eight active aircraft *(see table, page 79)*. These are with ASTAR Air Cargo (7), and National Airlines (1).

DC-9

The already-small DC-9 freighter fleet has been steadily declining, although the active fleet remains at 19 aircraft.

Operators include: USA Jet Airlines, Aeronaves, Ameristar Air Cargo, Everts Air Alaska, Stars Away Aviation, and Kalitta Charters.

MD-80

The MD-80 freighter fleet is still in its infancy. AEI announced the MD-80 passenger-to-freighter conversion programme in 2010. AEI has a backlog of 15 firm orders for MD-80 conversions, with the first aircraft currently parked *(see table, page 79)*, and due to for entry into service in the fourth quarter 2012.

The MD-80 conversion orders are from four undisclosed customers, although the first aircraft will be delivered to Everts Air Cargo.

Other narrowbodies

Other narrowbody freighters included here are the 707/720, BAe 146 freighter, and the CRJ200F. These total 29 active aircraft.

The 707/720 freighter fleet is very old, with just two active aircraft in service *(see table, page 79)*.

The BAe 146 freighter fleet reduced by three active units to 22 *(see table, page 79)*. The fleet is operated by TNT Airways (8), Pan Air (8), Cobham Aviation Services Australia (4), Nusantara Air Charter (1) and Manunggal Air (1).

One passenger-to-freighter conversion of a CRJ200 was carried out in the last year, taking the total fleet of CRJ200Fs to five *(see table, page 79)*. These are in service with West Atlantic (3) and Estafeta (2).

Turboprops

Like the narrowbody and widebody fleet, the turboprop freighter fleet has remained virtually constant over the past year. The overall fleet reduced by just one to 511 in June 2012 *(see table, page 79)*.

The turboprop freighter fleet is dominated by the Fairchild Metro, ATR-42F and -72F, Saab 340F, BAE ATP, and Convair 580/640.

Future

The freighter fleet has remained almost constant, with no major additions or reductions.

"There is significant over-capacity currently in the market," says Stephen Fortune, chief executive officer at Fortune Aviation. "Many orders of new-build freighters and freighter conversions are to replace existing capacity. For example, FedEx is replacing its DC-10s and MD-10s with 767Fs and 777Fs. Additionally, 737 Classic freighters are replacing older 727Fs and DC-9Fs in the market."

One reason for this over-capacity is that passenger airlines are increasingly using belly capacity to transport cargo. "The ratio between main deck cargo and belly cargo is now about 50/50," says Alan Hedge, research director at Air Cargo Management Group (ACMG). "New aircraft types, such as the 777, 787 and A380 offer more belly capacity than older aircraft, so more cargo is being carried in the belly of passenger aircraft than ever before."

Despite the current stagnation of the market, Fortune expects the freighter market to recover. "The freighter market will bounce back in the next three to five years," continues Fortune. "There is so much idle capacity currently parked that can be re-activated when it is needed. The air cargo market is not in long-term decline, and is anticipated to grow over the long term at a rate of 5-6% per year."

Hedge agrees. "We anticipate the active freighter fleet will be 50% larger than it is currently, with 49% more widebody freighters and 47% more narrowbodies than today," he says."

This forecast is supported by the total backlog of 281 aircraft, either as new production freighters, or for passenger-to-freighter conversions. An additional 60 aircraft were ordered either from the factory, or for conversion over the past year.

When this is added to the 458 parked aircraft, there is a significant amount of freighter capacity that could be added to the market at relatively short notice, as and when there is demand for it.

Older freighter types such as the 727, DC-8, DC-9, DC-10 and A300 will continue to be retired and replaced by re-activating parked freighters, newly converted freighters and new production freighters. AC