Attachment Four
Engine Continuous Airworthiness Maintenance Program

3.1.0 ENGINE CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM

A. The Colgan Air, Inc. PT6A-65B & -67D Engine Continuous Airworthiness Maintenance Program is based on the life cycle limits of the rotating components, as indicated in the applicable Pratt & Whitney Canada Service Bulletins, as well as field service experience and engine teardown data.

B. The PT6A-65B & -67D Engine Continuous Airworthiness Maintenance Program consists of a fixed hour and cycle limit at which the Gas Generator and the Power Section Modules will be overhauled.

C. The Gas Generator Module consists of the Accessory Gear Box and the Compressor Section. The Gas Generator Module will be overhauled at time intervals as stated in Chapter 4 of this manual. The overhaul will be performed in accordance with the applicable Pratt & Whitney PT6A-65B & -67D overhaul manuals, as revised.

D. The Power Section Module consists of the T5 System, the Power Turbine Disks, and the Reduction Gearbox. The Power Section Module will be overhauled at time intervals as stated in chapter 4 of this manual. The overhaul will be performed in accordance with the applicable Pratt & Whitney PT6A-65B & -67D overhaul manuals, as revised.

E. Overhauls performed under this maintenance program will be conducted at a Pratt & Whitney Canada Overhaul Service Center or a Certified Repair Station with Pratt & Whitney Canada PT6A-65B or -67D (whichever applies) repair authorization. All work will be performed in accordance with Pratt & Whitney Canada PT6A-65B or -67D (whichever applies) Maintenance and Overhaul Manual, as applicable.

F. All Gas Generator and Power Section Modules will be tested after an Overhaul. The testing of engine modules will be conducted in a Pratt & Whitney Canada approved and correlated Test Cell. All engine modules that do not meet required test specification will be returned to the Overhaul Facility for repair.

G. Whenever any engine module is inducted into a repair facility for overhaul, Colgan Air will ensure that the facility will perform a complete Airworthiness Directive research to determine the status of applicable ADs. All ADs will be complied with as directed by the Federal Aviation Administration (FAA).

H. All Service Bulletins which affect Colgan Air, Inc.'s FAA approved airworthiness limitations will be complied with. Service Bulletins which do not affect the airworthiness limitations will be evaluated by the Director of Maintenance, Director of Quality Control and Manage of Quality Assurance to determine if action will be taken.

I. The continuous monitoring of condition and airworthiness status of all engine modules will be conducted by Colgan Air, Inc. maintenance personnel. Engine trend monitoring will be conducted on a weekly basis and module monitoring will consist of routine borescope inspections as well as adherence to the scheduled and routine maintenance program outlined in this manual. Immediate corrective action will be taken in accordance with Pratt & Whitney Canada maintenance procedures at the time performance deteriorates or discrepancies are noted.

3.2.0 ENGINE CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM PROCEDURES

A. Engine Condition Trend Monitoring will be conducted on a weekly basis by the Quality Assurance Department. All trend data will be entered into the ECTM database by Records on a daily basis. Any component changed or inspection performed on the engine or engine systems that effects ECTM will be so updated in the ECTM database by Records. Any discrepancy with the trends will result in a ECTM follow up memo from the Quality Assurance Department to the Maintenance Department for follow up.

3.2.0 ENGINE CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM PROCEDURES (cont'd)

The item will be added to the CAM database for tracking and compliance by Records. This addition to the database is of a optional nature and does not render the engine unairworthy but is merely for maintenance to investigate a abnormal trend shift. Engine performance will be the deciding factor of airworthiness. Any maintenance actions will be documented on applicable work orders and forwarded to the Quality Assurance Department for review. Once trend shows normal parameters, the item will be removed from the CAM database and the memo closed out by maintenance

B. Engine Condition Borescope Monitoring provides the means to determine the condition of the engine's hot section, by a physical inspection. The borescope inspection will be conducted in accordance with the Pratt & Whitney Canada PT6A-65B or -67D (whichever applies) maintenance manual by qualified personnel. During the borescope one will determine the condition of the engine hot section and what maintenance if any will be required.

C. Engine maintenance will be performed in accordance with the approved Colgan Air, Inc Continuous Airworthiness Maintenance Program. This program consists of guidance for aircraft maintenance items as well as requirements for hot section inspections, borescope inspections, and replacement of life limited components.

D. Any vendor performing an engine repair or overhaul will provide, at Colgan Air request, a tear down analysis including abnormal discrepancies identified during the maintenance process. The teardown analysis report will be submitted to the Director of Quality Control when the engine is release to service.

3.3.0 SCHEDULED ENGINE MAINTENANCE PROCEDURES

A. Scheduled engine inspections and routine maintenance will be conducted in accordance with the guidance provided in the 1900 Airliner Continuous Airworthiness Maintenance Program outlined in this manual.

B. Fuel nozzles, consisting of the nozzle body, nozzle tip and nozzle sheath, will be inspected as an assembly, in accordance with the Pratt & Whitney Canada applicable Maintenance Manual.

C. Hot Section Inspections (HSI) should be performed at intervals of 2000 flight hours for the PT6A-65B and 4000 flight hours for the PT6A-67D engines. Hot Section components will be repaired or overhauled by a Pratt & Whitney Canada Overhaul Service Center or a Certified Repair Station with Pratt & Whitney PT6A-65B or -67D (whichever applies) repair authorization.

D. Certain engine components of the rotating group require replacement at specific time intervals. These components and their intervals have been established by Pratt & Whitney Canada Service Bulletin #14002, as revised, and contain listings of the Life Cycle Limited components and their retirement schedule.

3.4.0 UNSCHEDULED ENGINE MAINTENANCE PROCEDURES

A. Observe all procedures detailed in the GMM for unscheduled maintenance procedures as they relate to the airframe as well as the engine.

B. When line maintenance is inadequate to return a engine module to service, the module will be sent to a Pratt & Whitney Canada Overhaul Service Center or a Certified Repair Station with Pratt & Whitney Canada PT6A-65B or -67D (whichever applies) repair authorization. The extent of the work to be performed by the repair facility will be determined by Colgan Air, Inc. Consideration will be given to variables such as time and cycles since repair or overhaul and service bulletins status.

3.5.0 PROPELLER CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM

A. Propeller maintenance will be performed in accordance with the approved Colgan Air, Inc. Continuous Airworthiness Maintenance Program. This program consists of guidance for aircraft maintenance items as well as requirements for propeller inspections, servicing, and replacement of life limited components.

B. Airworthiness limitations for the propeller, including blades, are contained in chapter 4 of this manual. Propeller overhauls will be performed in accordance with the Hartzell 143 overhaul manual, as revised. The propeller blades will be maintained in accordance with the Hartzell composite blade manual 135, as revised, and discarded at time intervals as stated in chapter 4 of this manual.

C. When a propeller is inducted into a repair facility for overhaul, Colgan Air will ensure that the facility will perform a complete Airworthiness Directive (AD) research to determine the status of applicable ADs. All ADs will be complied with as directed by the Federal Aviation Administration.

D. All Service Bulletins which affect Colgan Air, Inc.'s FAA approved airworthiness limitations will be complied with. Service Bulletins which do not affect the airworthiness limitations will be evaluated by the Director of Maintenance, Director of Quality Control and Manage of Quality Assurance to determine if action will be taken.

E. Any vendor performing an propeller repair or overhaul will provide, at Colgan Air request, a tear down analysis including abnormal discrepancies identified during the maintenance process. The teardown analysis report will be submitted to the Director of Quality Control when the propeller is release to service.

ENGINE #47

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Continuous Airworthiness Maintenance Program

Engine Rotable Time / Cycle Service History

COLGAN AIR

240CJ BEECH 1900D UE-40 **A/C T.T. :** 16,503.5 **A/C T.C. :** 24,637

POS : RIGHT **Mfgr :** PRATT & WHITNEY **Model #** PT6A-67D

GAS GENERATOR SER# 114111

Total Time : 16,179.8
Total Cycles : 23,504.0
Time Since O/H : 1,237.6
Cycles Since O/H : 1,773.0
Time At O/H : 14,942.2
Cycles At O/H : 21,731.0
Time Since H.S.I. : 1,237.6
Cycles Since H.S.I. : 1,773.0

O/H Rem : 6,762.4

H.S.I. Rem : 2,762.4

POWER SECTION SER# 114111

Total Time : 16,179.8
Total Cycles : 23,504.0
Time Since O/H : 1,237.6
Cycles Since O/H : 1,773.0
Time At O/H : 14,942.2
Cycles At O/H : 21,731.0
O/H Rem : 6,762.4

FMP

TIMES and CYCLES WHEN INSTALLED ON A/C

LAST HSI TT : 14,942.2
LAST HSI TC : 21,731.0

	GAS GENERATOR	POWER SECTION
A/C TT :	15,265.9	15,265.9
A/C TC :	22,864.0	22,864.0
ENG TT :	14,942.2	14,942.2
ENG TC :	21,731.0	21,731.0
ENG TSO :	0.0	0.0
ENG CSO :	0.0	0.0

LIFE LIMITED COMPONENTS - SPECIFIC ENGINE CONFIGURATION

Description PartNumber	Serial #	Life Limit Cycles	Total Cycles	Remaining Cycles
DISK, POWER TURBINE (1ST STAGE) (ID# 520) 3037312	A000FA4A	15,000	1,773	13,227
DISK, POWER TURBINE (2ND STAGE) (ID# 521) 3037313	A000EC96	15,000	1,773	13,227
SHAFT ROTOR COMPRESSOR (ID# 523) 3043063	A000D3RC	24,000	1,773	22,227
ROTOR COMPRESSOR (1ST STAGE) (ID# 524) 3039001	65B902	24,000	1,773	22,227
ROTOR COMPRESSOR (2ND STAGE) (ID# 525) 3040952	33B355	24,000	12,006	11,994
ROTOR COMPRESSOR (3RD STAGE) (ID# 526) 3040933	66B408	24,000	1,773	22,227
ROTOR COMPRESSOR (4TH STAGE) (ID# 527) 3040944	35B805	24,000	12,006	11,994
IMPELLER CENTRIFUGAL (ID# 528) 3036898	7H013	24,000	1,773	22,227
DISK COMPRESSOR TURBINE (ID# 529) 3040911	A0005WN5	8,000	4,154	3,846

ENGINE #48

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Continuous Airworthiness Maintenance Program

Engine Rotable Time / Cycle Service History

COLGAN AIR

240CJ BEECH 1900D UE-40 **A/C T.T. :** 16,503.5 **A/C T.C. :** 24,637

POS : LEFT **Mfgr :** PRATT & WHITNEY **Model #** PT6A-67D

GAS GENERATOR SER# 114052

Total Time : 15,245.5
Total Cycles : 23,662.0
Time Since O/H : 3,120.0
Cycles Since O/H : 3,936.0
Time At O/H : 12,125.5
Cycles At O/H : 19,726.0
Time Since H.S.I. : 1,237.6
Cycles Since H.S.I. : 1,773.0

O/H Rem : 4,880.0

H.S.I. Rem : 2,762.4

POWER SECTION SER# 114052

Total Time : 15,407.6
Total Cycles : 23,883.0
Time Since O/H : 3,120.0
Cycles Since O/H : 3,936.0
Time At O/H : 12,287.6
Cycles At O/H : 19,947.0
O/H Rem : 4,880.0

FMP

TIMES and CYCLES WHEN INSTALLED ON A/C

LAST HSI TT : 14,007.9
LAST HSI TC : 21,889.0

	GAS GENERATOR	POWER SECTION
A/C TT :	13,383.5	13,383.5
A/C TC :	20,701.0	20,701.0
ENG TT :	12,125.5	12,287.6
ENG TC :	19,726.0	19,947.0
ENG TSO :	0.0	0.0
ENG CSO :	0.0	0.0

LIFE LIMITED COMPONENTS - SPECIFIC ENGINE CONFIGURATION

Description PartNumber	Serial #	Life Limit Cycles	Total Cycles	Remaining Cycles
DISK, POWER TURBINE (1ST STAGE) (ID# 530) 3037312	A0005YBA	15,000	3,936	11,064
DISK, POWER TURBINE (2ND STAGE) (ID# 531) 3037313	A00060A4	15,000	3,936	11,064
SHAFT ROTOR COMPRESSOR (ID# 532) 3043063	A00025PM	24,000	3,936	20,064
ROTOR COMPRESSOR (1ST STAGE) (ID# 533) 3039001	A00056FL	24,000	3,936	20,064
ROTOR COMPRESSOR (2ND STAGE) (ID# 534) 3040952	A00052EA	24,000	3,936	20,064
ROTOR COMPRESSOR (3RD STAGE) (ID# 535) 3040933	3H886	24,000	3,936	20,064
ROTOR COMPRESSOR (4TH STAGE) (ID# 536) 3040944	61B476	24,000	3,936	20,064
IMPELLER CENTRIFUGAL (ID# 537) 3036898	4H960	24,000	3,936	20,064
DISK COMPRESSOR TURBINE (ID# 538) 3040911	A0000931	8,000	7,086	914