Supporting Statement A
Extended Operations (ETOPS) of Multi-Engine Airplanes

OMB #2120-0718

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

Prior to the publication of the "Extended Operations (ETOPS) of Multi-Engine Airplanes" rule on January 16, 2007 (72 FR 1808), 14 CFR Part 121.161 prohibited two engine aircraft operators from flying over a route that contained a point more than 1 hour flying time from an adequate airport, except through a deviation. Prior to 2007 the FAA had issued deviations to the regulation to allow for two engine aircraft to operate up to 207 minutes from an adequate airport. In 2007 the "Extended Operations (ETOPS) of Multi-Engine Airplanes" regulation codified the previous practices that permitted certificated air carriers to operate two-engine airplanes over these long-range routes and extended the procedures for extended operations to all passenger-carrying operations on routes beyond 180 minutes from an alternate airport. This option is voluntary for operators and manufacturers. Because it is voluntary, the FAA provides an estimate of the paperwork burden for those who may participate in the future. The paperwork burden is associated with safety requirements to enable the FAA to assess the safety of long-range extended operations (ETOPS). These requirements required changes to parts 21, 25, 33, 121, and 135. Currently the longest ETOPS route is 240 minutes from an adequate airport.

This regulation is necessary to support the following elements of the DOT's Strategic Plan:

- **Safety: Reduce Transportation-Related Fatalities and Serious Injuries Across the Transportation System.** The safety of long-range, or extended, operations depends on the risk of critical loss of engine thrust, additional system failures during a diversion, the distance from an adequate airport used in a diversion, and the conditions encountered upon arrival at the diversion airport. This regulation contains requirements for engine monitoring, additional maintenance procedures, and the specific designation of adequate airports for diversions. Taken together, these requirements will increase the safety of flight for operations that go great distances around the world.

- **Infrastructure*:* Invest in Infrastructure to Ensure Mobility and Accessibility and to Stimulate Economic Growth, Productivity and Competitiveness for American Workers and Businesses.** Long-range operations are more efficient in that they utilize shorter routes, use less fuel, and eliminate the need for multiple take-offs and landings. These extended operations are simply a more efficient way of moving passengers across long distances in less time. Competition in international travel will increasingly depend on extended flights

- **Innovation: Lead in the Development and Deployment of Innovative Practices and Technologies that Improve the Safety and Performance of the Nation's Transportation System.** As mentioned before, because long-range operations require fewer take-offs and landings, and incorporate practical efficiencies in areas of security, movement through airports, economy of time, and less disruption of airport facilities, they greatly facilitate economic growth and development.

This regulation also supports the FAA's Strategic Plan:

- **Global leadership**- The worldwide aviation industry is interested in extended operations. Civil aviation authorities of other countries and international aviation organizations are carefully watching the FAA's efforts to develop regulations to govern extended operations. This regulation enhances worldwide air travel safety and efficiency.
- **System efficiency**- Allowing extended operations allows operators to take more direct routes to long-range destinations and improves overall system efficiency.
- **Safety**- The regulation addresses the safety aspects of extended operations through increased engine and fuel monitoring, maintenance training and procedures, and planning for the adequacy of alternate airports in case of a diversion.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The FAA uses this information collection to ensure the operators ETOPS program contains all the necessary elements of ETOPS and the aircraft used for ETOPS are operating to the ETOPS regulatory standards to minimize diversions, to preclude and protect diversions, and to ensure that all personnel are trained to minimize any adverse impacts of a diversion.

This collection of information is voluntary for manufacturers and operators. Aircraft manufacturers and airline operators who choose to perform Extended Operations of Multi-Engine Aircraft are the respondents to this collection. This collection is a reporting requirement. The information is collected as needed depending on each individual requirement which is outlined in question 12.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

The FAA continues to encourage the use of automated, electronic collection methods whenever possible. Air carriers may utilize existing maintenance, monitoring, and training databases wherever they exist to assist in the reporting of this information. The FAA estimates that electronic collection techniques can be utilized for 95% of the records.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

There is no duplication in the requirements of this regulation. In most cases, where the FAA has added an additional requirement, there are existing record-keeping requirements already in place. For example, this regulation adds ETOPS training to training requirements that already exist, but only for those operators who wish to participate in ETOPS operations. Likewise, there are existing requirements for maintenance records. ETOPS would add certain entries to these existing records.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

The FAA does not believe that this collection impacts small entities.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

If the collection of information is not received, the FAA will not be able to proceed with this program because there would be no way to ensure safety. The FAA has sought to minimize the collection burden to the extent that safety is not compromised.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- ***requiring respondents to report information to the agency more often than quarterly;***
- ***requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;***
- ***requiring respondents to submit more than an original and two copies of any document; requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;***
- ***in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;***
- ***requiring the use of a statistical data classification that has not been reviewed and approved by OMB;***
- ***that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or***
- ***requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.***

Because of the nature of extended operations, operators must report emergency conditions that cause a diversion immediately (within 72 hours), which may require respondents to report information to the agency more often than quarterly, as per 1320.5(d)(2)(i). Note that this is only a notification; it is not a plan for correcting the deficiency, which may take more time.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice published on January 22, 2020 (85 FR 3742). No comments were received.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

There are no payments or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

There is no assurance of confidentiality. The information submitted is a matter of public record in the interest of safety. Obtaining such information, however, would be subject to 5 U.S.C 552(b)(4). Specific areas of proprietary information may be held as confidential to the extent possible.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

There are no questions associated with this regulation of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices. * If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**

- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under item 13.**

ETOPS requirements only apply to operators that exceed a point farther than 60 minutes flying time from an adequate airport at an approved one engine inoperative cruise speed under standard conditions in still air. Therefore, there are few operators that meet this criterion. As noted in the response to question 1, the FAA is providing an estimate of the paperwork burden for those who may participate in the future. Currently there are 20 Operators and 4 engine manufacturers who operate under ETOPS. The estimated number of future respondents is seven (7) part 121 or 135 operators. The FAA maintains the projected numbers as a conservative estimate of potential burden.

As of the date of this submission, there are currently four (4) engine manufacturers who would incur information collection costs for engine monitoring. There have been changes to the estimated hourly burden and wage rates since the previous submission to account for this increase in the number of affected engine manufacturers. Thus, this submission includes a total of 11 respondents.

The collection of information includes seven areas, but not all seven areas apply to each operator or manufacturer. We list the areas specifically. All of these information requirements are considered *reporting* because they are required to gain extended operation or “ETOPS” authority.

1. Carriers who plan to traverse either the North Polar or South Polar Areas must submit a Passenger Recovery Plan. This rule does not apply for supplemental

all-cargo operations. A passenger recovery plan includes how a carrier would deal with a diversion to the alternate airport – what emergency vehicles (ambulance, fire fighting, etc.) are available; hotels or facilities for protecting passengers, etc. Since existing carriers would already have an approved passenger recovery plan, this data is being calculated for new ETOPS carriers. (14 CFR 121, Appendix P)

A technical specialist would prepare the Passenger Recovery Plan. The employee salary used to calculate this is equivalent to a GS-13 Salary (GS-13, Step 5 hourly wage, Kansas City Locality Pay) for an average wage of $48 per hour[1] with 31.4%[2] fringe benefits cost for a total of $63 per hour. With overhead added[3], the total salary is $71 per hour.

Initial: 7 operators x 2 plans x 100 hrs. =1400 hrs. x $71 = $99,400.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	7		
# of Responses per respondent	2		
Time per Response	100 hrs		
Total # of responses	14		
Total burden (hours)	1,400 hrs.		

These operators are also required to provide training for diversions as part of the Passenger Recovery Plan. Pilots, dispatchers, and flight attendants are trained to deal with the special situation in which a diversion requiring extraordinary procedures.

Pilot salaries fall across a broad spectrum. Therefore, an average pay rate was assumed for these calculations. According to Salary.com, the average yearly pilot salary is approximately $135,000 a year.[4] For an hourly wage, based on a pilot

[1] https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS_h.pdf
[2] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018
[3] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.
[4] https://www.salary.com/research/salary/alternate/airline-pilot-salary

flying 85 hours a month, the hourly rate would be $132 per hour. A 31.4%[5] fringe benefits cost was applied for a total of $173 per hour. With overhead added[6], the total salary is $202 per hour.

Aircraft Dispatcher salaries also fall across a broad spectrum. Therefore, an average pay rate was assumed for these calculations. According to Payscale.com, the average yearly dispatcher salary is approximately $50,200 per year.[7] This would calculate to an average wage of approximately $25 per hour. A 31.4%[8] fringe benefits cost was applied for a total of $33 per hour. With overhead added[9], the total salary is $39 per hour.

The average Flight Attendant hourly wage is $32.00 per hour[10]. A 31.4%[11] fringe benefits cost was applied for a total of $42 per hour. With overhead added[12], the total salary is $49 per hour.

Initial:

7 operators x 50 pilots x 1hr. = 350 hrs. x $202 = $70,700

7 operators x 5 dispatchers x 1 hr. = 35 hrs.x $39 = $1,365.

7 operators x 100 flight attendants x 1 hour = 700 hrs. x $49 = $34,300

Total Initial Hrs. = 1,085 Total = $106,365

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[5] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[6] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

[7] https://www.payscale.com/research/US/Job=Flight_Dispatcher/Salary

[8] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[9] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

[10] https://www.bls.gov/ooh/transportation-and-material-moving/flight-attendants.htm

[11] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[12] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	7		
# of Responses per respondent	155		
Time per Response	1 Hr		
Total # of responses	1,085		
Total burden (hours)	1,085		

1. The operators in the North Polar or South Polar region have to plan for communication disruptions caused by solar flare activity and thus incur planning costs. These operators also have special fuel considerations requiring reporting fuel freeze strategies. These operators also must develop a plan for mitigating crew exposure to radiation during solar flare activity. (14 CFR Part 121)

   A technical specialist would prepare the Communication Disruptions, Fuel Strategies, and Radiation during Solar Flare Plans. The employee salary used to calculate this is equivalent to a GS-13 Salary (GS-13, Step 5 hourly wage, Kansas City Locality Pay) for an average wage of $48 per hour[13] with 31.4%[14] fringe benefits cost for a total of $63 per hour. With overhead added[15], the total salary is $71 per hour.

Communication Disruptions: 2 operators x 100 hrs = 200 hrs x $71. = $14,200.

Fuel strategies: 2 operators x 100 hrs = 200 hrs x $71. = $14,200.

Radiation During Solar Flare Activity: 2 operators x 100 hrs = 200 hrs x $71 = $14,200

Total Initial Hrs. = 600 **Total = $42,600**.

[13] https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS_h.pdf

[14] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[15] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	2		
# of Responses per respondent	3		
Time per Response	100 Hrs		
Total # of responses	6		
Total burden (hours)	600 Hrs		

2. Part 21, specifically § 21.4 contains reporting requirements for problem reporting and tracking, including in-flight engine shutdowns. One manufacturer of airplanes suitable for ETOPS makes such reports to prove the reliability of engines for ETOPS. This manufacturer is also required to investigate causes of engine shut-downs in flight.

   An Aviation Maintenance Technician would be responsible for this initial duty. According to Payscale.com, the average salary for an aviation maintenance technician is $24 per hour.[16] With 31.4%[17] fringe benefits cost for a total of $32 per hour. With overhead added[18], the total salary is $37 per hour.

   An Aviation Engineer would be responsible for investigation duties. The average salary for an Aviation Engineer is $75,000 per year based on data obtained via Payscale.com.[19] This would make the average hourly wage $36 per hour. With 31.4%[20] fringe benefits cost for a total of $47 per hour. With overhead added[21], the total salary is $55 per hour.

Initial:

[16] https://www.payscale.com/research/US/Job=Aviation_Maintenance_Technician/Hourly_Rate?signedUp

[17] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[18] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

[19] https://www.payscale.com/research/US/Job=Aviation_Engineer/Salary

[20] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[21] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

1 manufacturer x 2 staff members x 2080 hrs. = 4,160 hrs. x $37 = $153,920

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	2,080		
Time per Response	2 hr.		
Total # of responses	2,080		
Total burden (hours)	4,160		

Investigations (also a reporting requirement)
Initial:

1 operator x 1,000 hrs. x $55 (engineer) = $55,000

1 operator x 1,000 hrs. x $37 (technician) = $37,000

Total Investigation costs = $92,000

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	1,000		
Time per Response	2 hrs.		
Total # of responses	1,000		
Total burden (hours)	2,000 hrs		

Total Initial and Investigation = 4,080 Hours Total: $245,920

3. Part 25, which contains the certification requirements for large airplanes, requires certification of fire suppression systems, electrical systems design, fuel system design, and system assessments for ETOPS. One manufacturer will incur these costs. Because of the reliability required for long range flights, these are

information collections beyond what is normally required for certification purposes.

An Aviation Engineer would be responsible for these duties. The average salary for an Aviation Engineer is $75,000 per year based on data obtained via Payscale.com.[22] This would make the average hourly wage $36 per hour. With 31.4%[23] fringe benefits cost for a total of $47 per hour. With overhead added[24], the total salary is $55 per hour.

Fire suppression: 1 manufacturer x 21,000 hours (13 engineers) x $55 = $1,155,000

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	21,000		
Time per Response	1 hr.		
Total # of responses	21,000		
Total burden (hours)	21,000		

Electrical system: 1 manufacturer x 30,000 hours (15 engineers) x $55 = $1,650,000

[22] https://www.payscale.com/research/US/Job=Aviation_Engineer/Salary

[23] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[24] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	30,000		
Time per Response	1 Hr		
Total # of responses	30,000		
Total burden (hours)	30,000 Hrs		

Fuel system design 1 manufacturer x 30,000 hours (15 engineers) x $55 = $1,650,000

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	30,000		
Time per Response	1 Hr		
Total # of responses	30,000		
Total burden (hours)	30,000 Hrs		

System assessment: 1 manufacturer x 10,000 hours (5 engineers) x $55 = $55,000.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	10,000		
Time per Response	1 Hr		
Total # of responses	10,000		
Total burden (hours)	10,000 Hrs		

Total Hrs. = 91,000 hrs. **Total = $4,510,000**

4. The regulation adds engine requirements for an engine manufacturer seeking ETOPS approval. Part 33 requires oil tank design requirements to prevent oil loss and that the manufacturer develop an engine monitoring program. Currently, four (4) engine manufacturers incur these one-time costs.

   An Aviation Maintenance Technician would be responsible for this duty. According to Payscale.com, the average salary for an aviation maintenance technician is $24 per hour.[25] With 31.4%[26] fringe benefits cost for a total of $32 per hour. With overhead added[27], the total salary is $37 per hour.

Engine monitoring.

4 manufacturer x 1 technician x 5,000 hrs. x $37. = $740,000.

Total Hrs. = 20,000 hrs. **Total = $740,000**

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	4		
# of Responses per respondent	1,250		
Time per Response	1 Hr		
Total # of responses	5,000		
Total burden (hours)	5,000 Hrs		

5. Each new operator's pilots, flight attendants, and dispatchers will require training on ETOPS specific procedures to comply with the existing provisions of Section 121.415 that require training on the provisions of the operating certificate and operating manual.

Pilot salaries fall across a broad spectrum. Therefore, an average pay rate was assumed for these calculations. According to Salary.com, the average yearly pilot

[25] https://www.payscale.com/research/US/Job=Aviation_Maintenance_Technician/Hourly_Rate?signedUp

[26] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[27] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

salary is approximately $135,000 a year.[28] For an hourly wage, based on a pilot flying 85 hours a month, the hourly rate would be $132 per hour. A 31.4%[29] fringe benefits cost was applied for a total of $173 per hour. With overhead added[30], the total salary is $202 per hour.

Aircraft Dispatcher salaries also fall across a broad spectrum. Therefore, an average pay rate was assumed for these calculations. According to Payscale.com, the average yearly dispatcher salary is approximately $50,200 per year.[31] This would calculate to an average wage of approximately $25 per hour. A 31.4%[32] fringe benefits cost was applied for a total of $33 per hour. With overhead added[33], the total salary is $39 per hour.

The average Flight Attendant hourly wage is $32.00 per hour[34]. A 31.4%[35] fringe benefits cost was applied for a total of $42 per hour. With overhead added[36], the total salary is $49 per hour.

Training:
7 operators x 50 pilots x 4 hours = 1,400 hours x $202 = $282,800.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	7		

[28] https://www.salary.com/research/salary/alternate/airline-pilot-salary
[29] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018
[30] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.
[31] https://www.payscale.com/research/US/Job=Flight_Dispatcher/Salary
[32] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018
[33] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.
[34] https://www.bls.gov/ooh/transportation-and-material-moving/flight-attendants.htm
[35] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018
[36] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

# of Responses per respondent	50		
Time per Response	4 Hrs		
Total # of responses	350		
Total burden (hours)	1,400 Hrs		

7 operators x 3 dispatchers x 4 hours = 84 hours x $39 = $3,276.

Summary (Annual numbers)	**Reporting**	**Recordkeeping**	**Disclosure**
# of Respondents	7		
# of Responses per respondent	3		
Time per Response	4 Hrs.		
Total # of responses	21		
Total burden (hours)	84 Hrs		

7 operators x 100 flight attendants x 4 hours = 2,800 hours x $49 = $137,200

Summary (Annual numbers)	**Reporting**	**Recordkeeping**	**Disclosure**
# of Respondents	7		
# of Responses per respondent	100		
Time per Response	4 Hrs		
Total # of responses	700		
Total burden (hours)	2,800 Hrs		

Total Hours: 4,284 Hours **Total: $423,276**

1. Most of the Part 135 operators plan their flight to avoid going over 180 minutes from an airport so as to avoid ETOPS requirements. (Flights from the West coast to Hawaii, for example.) There is the possibility, however, of one Part 135

South Pacific operation that may exceed the 180-minute exclusion. Pilots will receive 4 hours for initial training and 1 hour for recurrent training.

Pilot salaries fall across a broad spectrum. Therefore, an average pay rate was assumed for these calculations. According to Salary.com, the average yearly pilot salary is approximately $135,000 a year.[37] For an hourly wage, based on a pilot flying 85 hours a month, the hourly rate would be $132 per hour. A 31.4%[38] fringe benefits cost was applied for a total of $173 per hour. With overhead added[39], the total salary is $202 per hour.

Initial Training

1 operator x 16 pilots x 4 hours = 64 hours x $202 = $12,928

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	16		
Time per Response	4 Hrs		
Total # of responses	16		
Total burden (hours)	64 Hours		

Recurrent Training

1 operator x 16 pilots x 1 hour = 16 hours x $202 = $3,232

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	1		
# of Responses per respondent	16		

[37] https://www.salary.com/research/salary/alternate/airline-pilot-salary

[38] Bureau of Labor Statistics, Employer Costs for Employee Compensation – September 2018, USDL-18-1941, Released December 14, 2018

[39] Source: Cody Rice, U.S. Environmental Protection Agency, "Wage Rates for Economic Analyses of the Toxics Release Inventory Program" (June 10, 2002), https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005.

Time per Response	**1 Hr**		
Total # of responses	**16**		
Total burden (hours)	**16 Hrs**		

Total Hours: 80 Hours **Total: $16,160**

Summary of Initial and Total Paperwork Hours and Costs

Category	Initial Hours	Initial Cost
Part 121		
Passenger Recovery Plans	1400	$99,400
Passenger Recovery Training	1085	$106,365
North/South polar – communication disruptions	200	$14,200
North/South polar – fuel strategies	200	$14,200
North/South polar – solar flare radiation	200	$14,200
Part 21		
ETOPS Reporting	4,160	$153,920
Investigations	2,000	$92,000
Part 25		
Fire suppression	21,000	$1,155,000
Electrical system design	30,000	$1,650,000
Fuel system design	30,000	$1,650,000

System assessment	10,000	$550,000
Part 33		
Engine monitoring	5,000	$740,000
Part 121 Training Requirements – 121.415		
Pilot Training	1,400	$282,800
Dispatcher Training	84	$3,276
Flight Attendant Training	2,800	$137,200
Part 135		
South Pacific operations	80	$16,160
TOTAL	109,609	$6,678,721

Estimated Annual Burden: 36,536 Hours. This burden was determined by dividing the total 109,609 by three years.

13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information.

There are no additional costs not already included in question 12.

14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead,

printing, and support staff), and any other expense that would not have been incurred without this collection of information.

Because ETOPS operations have been on-going for 20+ years, inspectors are familiar with the overall requirements. Only minimal training in new requirements has been necessary. ETOPS surveillance is considered part of an inspectors normal job duties.

15. Explain the reasons for any program changes or adjustments.

There have been changes to the estimated hourly burden and wage rates since the previous submission to account for an increase in the number of affected engine manufacturers. Since respondents are not required to submit annually, this burden was calculated by dividing the total burden by 3 years.

The agency has separated collection activity into appropriate information collections. There has not been additional forms or applications added.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

There are no plans for publication.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

There is no plan to seek such approval.

18. Explain each exception to the topics of the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

There are no exceptions.