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Aerial Fire Fighting Operational Statistics (2024): Very Large/ Large Air Tankers

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Abstract: Wildfires, a natural part of the wildland life cycle, are experiencing a decades-long trend of increased frequency, duration, and magnitude, resulting in increased risk of fatalities and property damage. Fire suppression methods are adapting accordingly, including the increased use of aerial firefighting. Aerial firefighting, conducted in coordination with ground crews, provides real-time reconnaissance of a wildfire and performs strategic drops of retardant to contain and/or suppress the fire. These flight operations require airport and air traffic control infrastructure. The purpose of this report is to provide statistics on the U.S. aerial firefighting fleet, flight operations, and airport utilization and equipment in 2024. This information, which is not readily available, may be of use to airport planners, air navigation service providers, and policy makers. Thirty-four (34) Very Large/Large Air Tankers (VLAT/LATs) were under contract with the United States Forest Service (USFS) Multiple Award Task Order Contracts (MATOCs) in 2024. The aircraft, ranging in age from 27 to 57 years, performed 11,219 retardant drop and reposition flights. Flights operated on 88% of the days with an average of 35 flights per day and a maximum of 200 flights per day. The number of flights per aircraft across the fleet was not uniform (average 288 flights, max 465 flights). Consistent with firefighting practices, the flights operated under Visual Flight Rules (VFR), mostly in the afternoons, with an average retardant drop flight duration of 34 min. Two hundred and seven (207) airports supported at least one departure, with 14 airports supporting 50% of the departures. Eighty-six (86%) percent of the airports were towered and 84% had precision approach procedures. All but two military airports were public airports that are part of the National Plan for Integrated Airport System (NPIAS) and eligible for Airport Improvement Plan (AIP) funding. Runway length and weight bearing are limitations at several airports. Furthermore, operations are no longer limited to airports west of the Rockies, with increased operations in the mid-west and east coast.

Keywords: aerial firefighting; airport operations; retardant drops

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1. Introduction

Wildfires are a natural and essential part of the wildland life cycle and play a crucial role in maintaining ecological balance and promoting biodiversity. Wildfires in the United States, however, have become more frequent due to prolonged droughts [1] and the expanded human development in fire-prone regions [2]. Over the past several decades, rising temperatures and shifting precipitation patterns have intensified fire conditions, leading to extended fire seasons that now last several months longer than in previous decades [3]. The number of large wildfires, particularly megafires exceeding 100,000 acres, has increased since the early 2000s [4].

In response to these trends, wildfire management has evolved through technological advancements and strategic policy changes. For example, remote sensing and satellite imagery now play a crucial role in monitoring fire-prone areas [5], and artificial intelligence and predictive modeling have been integrated into fire forecasting [6].

Aerial firefighting has also undergone significant advancements to support ground crew operations with wildfire containment suppression efforts. Helicopters are equipped with precision water-dropping systems and infrared cameras to provide real-time situational awareness, enabling better coordination with ground crews [7]. Night-flying aircraft and drones have also been introduced to conduct suppression efforts around the clock, helping to contain fires in their early stages when visibility is typically reduced for traditional firefighting operations [8].

Very Large Air Tankers (VLATs) and Large Air Tankers (LATs) increasingly play a critical role in the initial attack, establishing containment lines, and suppression [9–11]. With their range and speed, VLATs and LATs provide rapid response to wildfires in remote locations and/or rugged terrain. VLATs, such as DC-10s, carry up to 10,000 gallons of retardant and drop approximately a one-mile containment line (depending on conditions). LATs, such as MD-87, 737, BAE 146, and C-130 s, carry between 3000 and 4000 gallons of retardant, and drop a 1/3 mile containment line.

VLAT and LAT operations are supported by a network of airports, designated as air tanker bases, that have the necessary infrastructure to support these operations [12].

This paper provides statistics on VLAT and LAT aerial firefighting operations and the demands on airports in the U.S. in 2024. This information, which is not readily available, may be of use to airport planners, air navigation service providers, and policy makers.

2. Materials and Methods

The section describes the data sources and the process for analyzing the aircraft, flight operations, and airport operations.

2.1. Data Sources

The data sources used for this analysis are listed in Table 1.

Table 1. Data Sources.

Data	Description	Notes
MATOC 2024 Contracts for VLATS	List of Tail Numbers for MATOC	
FAA Aircraft Registry Data-base	Ownership and Aircraft Info by Tail Number	https://registry.faa.gov/aircraftinquiry, accessed on 6 March 2025
FAA Characteristics Data-base	Aircraft Model Information	https://www.faa.gov/airports/engineering/aircraft_char_database, accessed on 6 March 2025
UTC Time Zone Corrections	Time Zone Data	https://www.iana.org/time-zones, accessed on 6 March 2025
Flight Track Data-base	Flight Data	Publicly available flight data
Airport Data and Information Portal	FAA Airport Data-base	https://adip.faa.gov/agis/public/#/public, accessed on 6 March 2025
Heliport Data	FAA Heliport Data-base	https://adip.faa.gov/pub/Heliports.xlsx, accessed on 6 March 2025
Landing Zone for Heliports	Identifying Landing Zones for Rotary Wing Operations	Proprietary data

2.2. Process

The process for analyzing the data, summarized in Figure 1, includes the following seven steps:

1. Collate Tail Numbers and Bases from MATOC 2024 Contract: This process generates a tail number list.
2. The Merge Aircraft Registration, Characteristics, and Tail Number Data process uses the FAA Aircraft Registry data-base and the FAA Aircraft Characteristics data-base. The process generates a vehicle data file.
3. The Perform Statistical Analysis process uses the vehicle data file to generate Aircraft Characteristics Statistical Information including Aircraft Model, age of fleet, TOGW, and Landing Gear Configuration. For the purpose of this paper, statistics include minimum, median, mean, maximum, and standard deviation. Excel spreadsheet functions were used.
4. The Merge Tail Number and Flight Track Data process uses Flight Track data for each tail number to generate flight operations data. Data are converted from UTC to local time.
5. The Perform Flight and Airport Statistical Analysis process uses flight operations data to generate flight operations data such as flights per day, average flights per day, flight durations, average flights per day, and flight operations at each airport. For the purpose of this paper, statistics include minimum, median, mean, maximum, and standard deviation. Excel spreadsheet functions were used.
6. The Merge Airport Location, Infrastructure, and Equipment Data process generates the airport and heliport data list. The process uses an FAA Airport data-base and a Heliport data-base (created for this analysis).
7. The Perform Airport Operations Statistical Analysis process generates airport and heliport infrastructure and equipment statistical information including the number of runways, runway weight limitations, and navigation equipment. The process uses the airport and heliport list and data-base of landing zones near airports and heliports (created for this analysis). For the purpose of this paper, statistics include minimum, median, mean, maximum, and standard deviation. Excel spreadsheet functions were used.

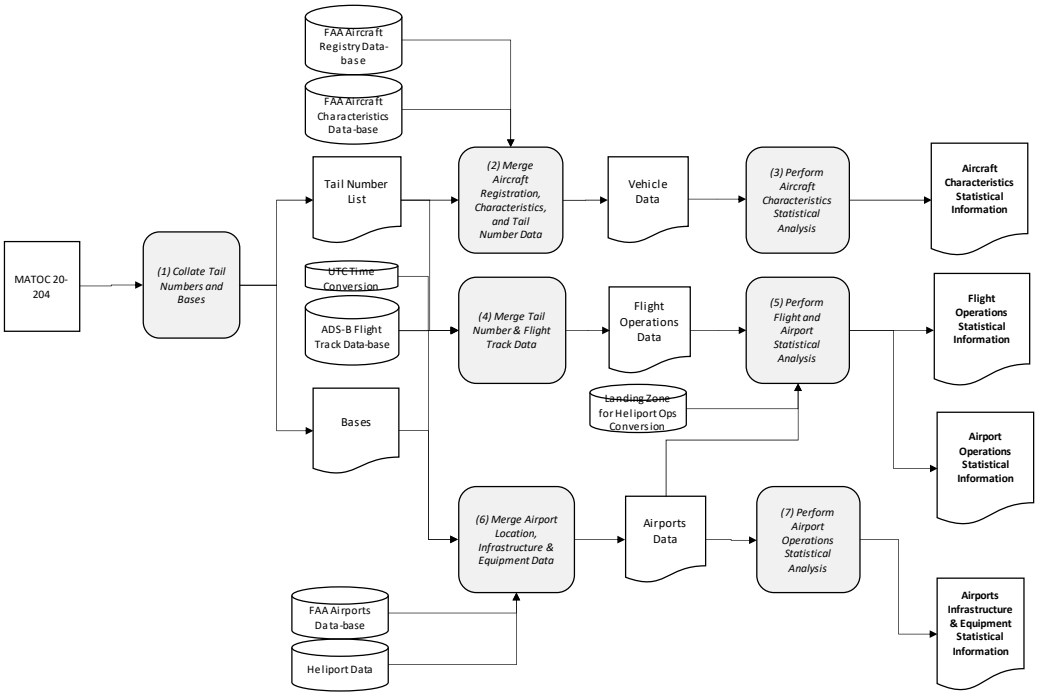


Figure 1. Process for analyzing data and generating the results.

3. Results

In 2024, there were 887 air tanker mobilizations [13]. This is the median mobilization account over the last 10 years. A detailed analysis of fleet characteristics, flight operations, airport operations, and airport characteristics was conducted in 2024.

3.1. Fleet Characteristics

The 2024 the MATOC fleet was composed of 34 aircraft (Table 2). There were 16 BAE–146 class vehicles with a retardant capacity of 3000 gallons, 14 vehicles with a 4000-gallon capacity (737, DC-9, and C-130), and 4 DC-10s' that had a retardant capacity of 9400 gallons. The C-130s load retardant via pre-filled roll-on tanks to reduce retardant loading times. The other vehicles load retardant through flow (i.e., batch loading pumps or gravity feed).

Table 2. MATOC fleet 2024.

Aircraft Type	Count	Retardant Capacity (Gallons)	Operator	Notes
C-130	4	4000	Coulson Aviation	https://www.coulsonaviationusa.com/fleet, accessed on 6 March 2025
737-3h4/S	3	4000	Coulson Aviation	https://www.coulsonaviationusa.com/fleet, accessed on 6 March 2025
AVRO 146-RJ85A	7	3000	Aero Flite	https://aerofliteinc.com/aircraft-fleet, accessed on 6 March 2025
BAE 146 Series 200A	9	3000	Neptune Aviation	https://neptuneaviation.com/air-tanker-operations/, accessed on 6 March 2025
DC-10-30	4	9400	10-Tanker	https://www.10tanker.com/, accessed on 6 March 2025
CD-9-87	7	3000	Corsair Two	https://www.eatanker.com/, accessed on 6 March 2025 https://aerotanker.blog/, accessed on 6 March 2025

The fleet is an aging fleet (Figure 2). The oldest aircraft, the C-130s, are 57 years old since the date of manufacture. The newest aircraft, RJ85A, is 25 years old since the date of manufacture. The number of aircraft is equally split above and below the mean age of 33.5 years and a median age of 34 years.

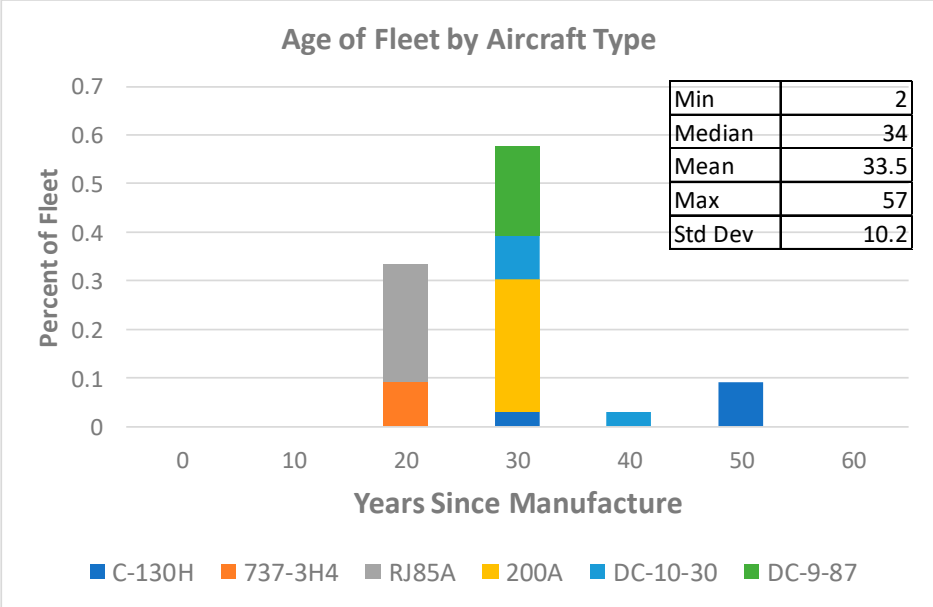


Figure 2. Age of the fleet is equally split above and below the mean age of 33.5 years.

3.2. Flight Operations

Analysis of flight operations was conducted for 2024.

3.2.1. Overall Flight Operations

An estimated total of 11,219 flights were conducted during this period. Twelve percent (12%) percent of the days during this period did not have flights. These days include days when there were no active wildfires, or days with an active wildfire, but VLATS/LATS were not dispatched. Eighty-eight percent (88%) of the days had at least one VLAT/LAT flight.

3.2.2. Flights per Day

Of the days in which the VLATS/LATS were active (Figure 3), the maximum number of flights per day was 200 (26 July 2024, Camp Fire). The median number of flights per day was 22 with an average of 43 flights per day. The standard deviation was 43 flights per day. There were 21 days in which the number of flights exceeded 2σ (121 flights per day) and 11 days in which the number of flights exceeded 3σ (11 flights per day).

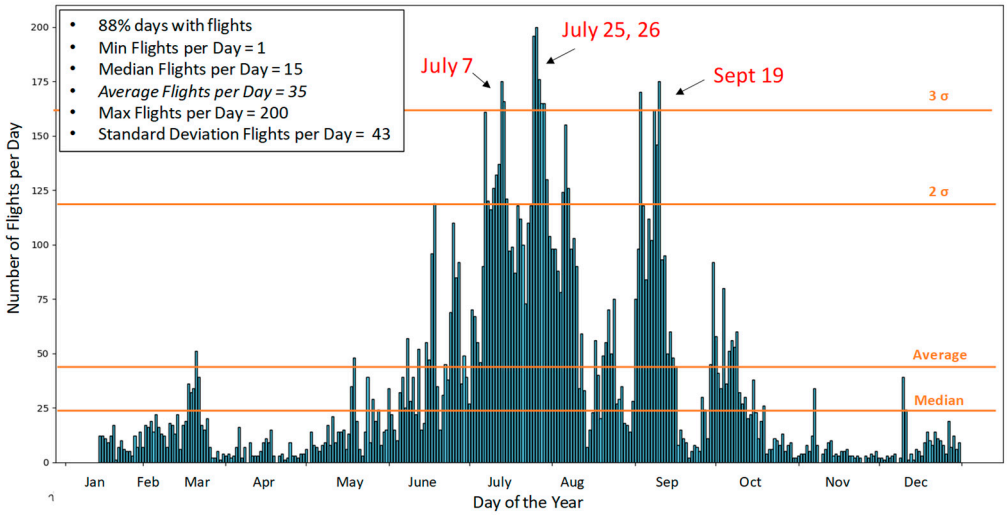


Figure 3. Number of flights per day for each day of the year.

Ranked flights per day exhibit a power curve distribution. Thirty-one (31) percent of the days had more than 50 VLAT/LAT flights. Fourteen (14) percent of the days had more than 100 flights.

Retardant drop flights occurred on every day in which the VLATS/LATS were active. On one day, across the fleet, there were as many as 157 retardant drop flights. The average number of retardant drop flights per day is 22, with a median of 8. On 45% percent of the days when the VLATS/LATS were active, there were less than five retardant drop flights per day.

Repositioning flights occurred on every day in which the VLATS/LATS were active. On one day, across the fleet, there were as many as 63 repositioning flights. The average number of repositioning flights per day is 10, with a median of 5. Note repositioning flights includes flights for maintenance purposes.

3.2.3. Flights by Tail Number

The number of flights by tail number ranged from 465 to 1. The average number of flights by tail number was 288 in total, with a median of 319 flights (Figure 4). The distribution of flights by tail number is asymmetric with a slight left tail. Fifty-eight (58) percent of the tail numbers operated more than the median number of flights during the period.

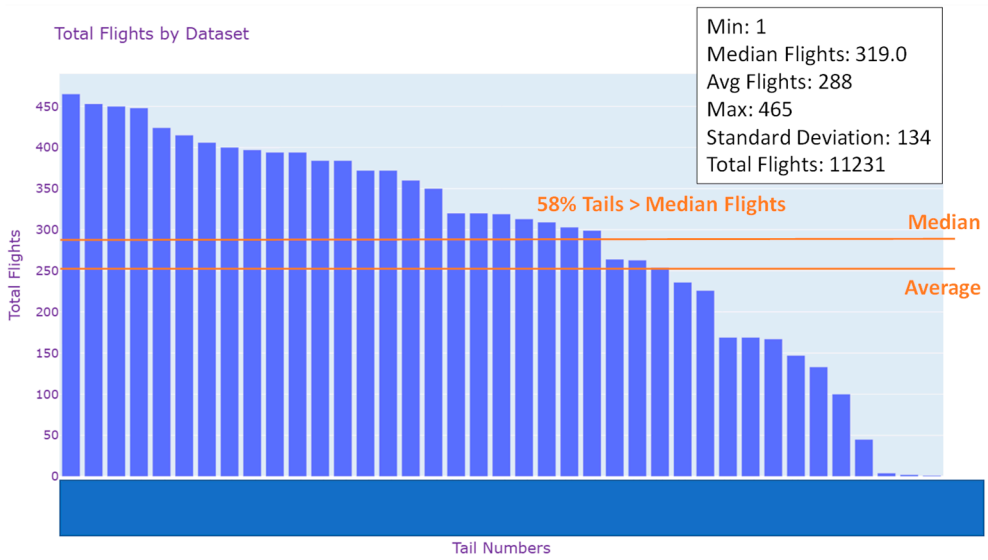


Figure 4. Total flights for each tail number.

3.2.4. Flight Departure Time of Day

Consistent with aerial firefighting practices, VLAT/LAT flights operate under Visual Meteorological Conditions (VMC). The VLAT/LAT flights departed predominantly during daylight hours (Figure 5). The majority of both retardant drop and repositioning flights (>60%) departed after noon local time.

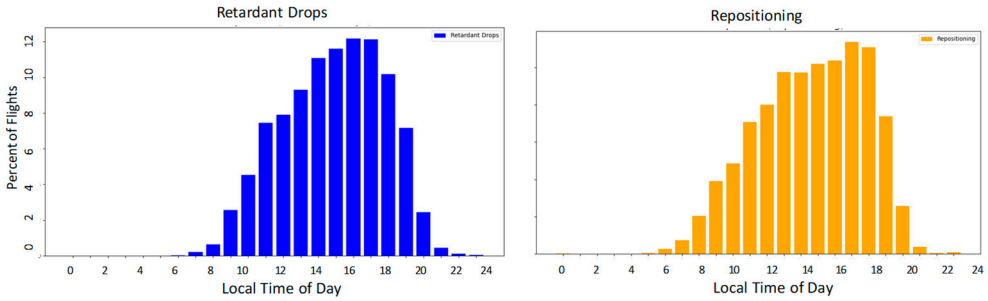


Figure 5. Time of day of departures for retardant drop flights and repositioning flights. Most operations take place after noon.

3.2.5. Flight Duration

Retardant drop flights exhibited wheels-off to wheels-on times with a mean of 38 min (estimated 220 miles) and median of 34 min (estimated 200 miles) roundtrip (Figure 6). These times include transit to the drop zone, loiter, drop, and then transit from the drop zone to the base.

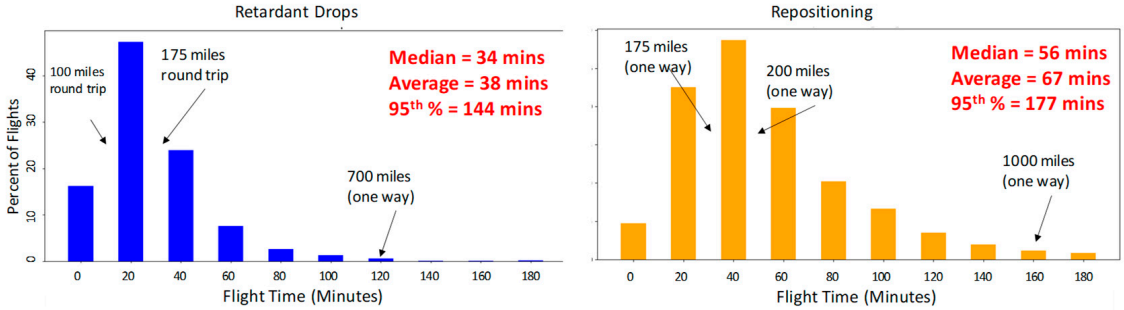


Figure 6. Probability distribution of flight duration (minutes) for retardant drop flights and repositioning flights.

Repositioning one-way flights exhibited wheels-off to wheels-on time distribution with a mean of 67 min (estimated 390 miles) and median of 56 min (estimated 325 miles) (Figure 6).

3.2.6. Ramp Turn-Around Time for Retardant Drop Flights

Ramp turn-around time for retardant drop flights is measured from wheels-on to wheels-off for sequential retardant drop flights on the same day. This includes time at the retardant pit as well as time to and from the pit including departure queueing and ramp congestion. The estimated retardant loading time is 30–45 min for the DC-10 and 20–30 min for the 737, DC-9, and Avro 146. These times are reflected in the ramp turn-around time distribution: mean 36 min, median 25 min. Ten (10) percent of the flights exceeded 40 min turn-around time which may be the result of dispatch instructions as well as ramp congestion and departure queueing delays.

3.3. Airport Operations

The MATOC 2024 fleet departed from 207 airports (Figure 7). One-hundred and five (105) airports have five or more departures. Fifty (50) airports supported 90% of the departures. Fourteen (14) airports supported 50% of the departures (Table 3).

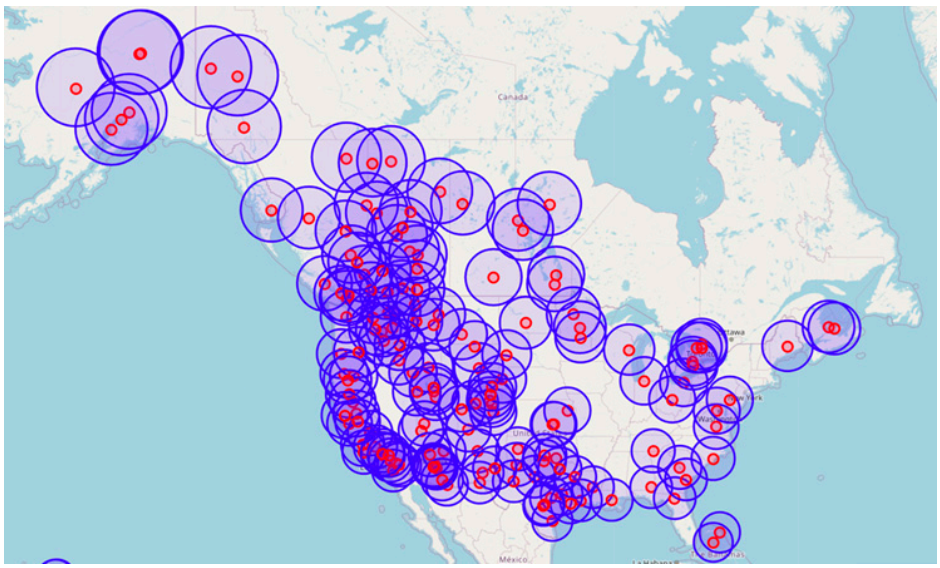


Figure 7. Geographic location of airports used by the fleet (2024). The blue circles show the geographic coverage from a 150 nm range from the airport.

Table 3. Top 14 airports supported 50% of VLAT/LAT flights.

Airport	% Total VLAT/LAT Flights
Redmond, OR (KRDM)	6.4
San Bernadino, CA (KSBD)	6.0
Redding CA, (KRDD)	4.1
Sacramento, CA (KMCC)	4.0
Lancaster, CA (KWJF)	3.6
La Grande, CA (KLGD)	3.3
Boise, ID (KBOI)	3.2
Missoula, MT (KMSO)	3.0
Santa Maria, CA (KSMX)	2.8
Rogue Valley/Medford, OR (KMFR)	2.6
Chico, CA (KCIC)	2.6
Billings, MT (KBIL)	2.4
Cedar City, UT (KCDC)	2.2
Phoenix-Mesa, AZ (KIWA)	2.2

Two airports used are military airports: Fort Huachuca/Sierra Vista, Arizona (Army) and Hill Air Force Base—Ogden Utah. The remaining airports are all publicly owned and part of the National Plan for Integrated Airports (NPIAS).

Eighty-four (84) percent of the airports used had two or more runways.

For the longest runway at each airport, the median runway length is 9000′ and the mean is 9127′ (Figure 8). The shortest length of the longest runway is 5060′ (KPTV—Porterville, California) with the longest 13,503′ (KMWH—Grant County Intl Moses Lake, WA, USA).

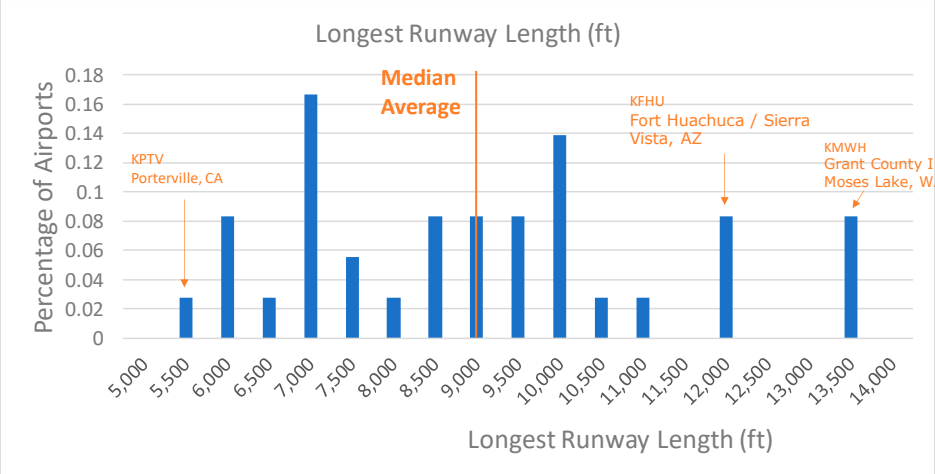


Figure 8. Percentage of airports used for each longest runway length. Fifty percent of the airports have a runway of less than 9000′.

The lowest airport elevation is sea level 46′ (KCRP—Corpus Christi, Texas), and the highest elevation is 6187′ (KCOS—Colorado Springs, Colorado). The mean and median elevation is 2872′.

The distribution of runway weight bearing for dual-tandem landing gears of VLATS and LATS has a median of 270,000 lbs and a mean of 372,000 lbs. To support VLATS and LATS operations, many airports provide a waiver. Thirty-six (36) percent of the airports used by VLATS and LATS in the 2024 fire season did not have a Pavement Classification Number (PCN) classification. The median PCN is 60 with a mean PCN of 53. The PCN is another way of assessing the weight-bearing capacity of airport runways. PCN is a standardized method to quantify the structural strength of an airport's runway, taxiway, or other pavements, ensuring that aircraft operate safely without compromising infrastructure integrity.

Eighty-six (86) percent of the airports used by VLATS and LATS in the 2024 fire season had a control tower. Many of the most used airports were non-towered: KCOE (Coeur d'Alene, Idaho), KINW (Winslow, Arizona), KLGD (La Grande, Oregon)—3.6% of flights, KPTV (Porterville, California), KPRB (Paso Robles, California), and KMYL (McCall, Idaho).

Airports supporting VLATS and LATS operations in the 2024 fire season all supported precision approach procedures: RNAV (GPS)—89%, ILS—83%, VOR, VOR-DME, VORTAC—80%, RNAV (RNP)—44%, GPS—6%, and Published Visual—4%.

4. Discussion

The section discusses the implications of the above statistical findings.

4.1. Fleet Age and Part Obsolescence

The existing VLAT/LAT fleet is an aged fleet (mean 33 years, max 57 years). As the aircraft age, part obsolescence is a growing problem resulting in increased maintenance costs.

Unlike commercial airliners, which benefit from large-scale manufacturing, the niche market for specifically designed aerial firefighting aircraft makes it difficult to achieve economies of scale, leading to high per-unit costs [14]. Barring government subsidies or changes in the economics of aerial firefighting, a clean-sheet design of VLAT/LAT is unlikely. Due to these economics, the industry is obliged to rely on converting the existing commercial and military aircraft rather than investing in purpose-built designs.

One of the ways to address this issue is to enable the sale of the Department of Defense's excess aircraft for aerial firefighting purposes (e.g., the U.S. Congress has a bill pending -the Aerial Firefighting Enhancement Act of 2025).

4.2. Fleet Size and Availability

The increasing frequency and intensity of wildfires have raised concerns about the size of the fleet to meet operational wildfire demands [15]. For example, in 2024, the National Interagency Coordination Center Wildland Fire Summary and Statistics Annual Report [11] identified that 16% of air tanker mobilization requests were "Unable to Fulfill (UTF)". Although the request process is complex and there are many reasons for UTF, the statistics suggest a shortfall even though the 2024 fire season was relatively low.

The primary factor determining the privately owner VLAT/LAT fleet size in the U.S. is the government contracting mechanism. The U.S. Forest Service employs two primary contracting mechanisms to manage its fleet of Very Large Air Tankers (VLATs) and Large Air Tankers (LATs): Exclusive-Use (EU) contracts and Call-When-Needed (CWN) contracts [13].

EU contracts provide guaranteed availability of aircraft for a specified period, ensuring that tankers are readily accessible during peak wildfire seasons. In contrast, CWN contracts allow the agency to request aircraft on an as-needed basis (if they are available).

While CWN contracts offer flexibility and cost savings to the government during periods of low fire activity, they present challenges with regard to fleet expansion and readiness. CWN contracts shift the financial risk to private service providers who must maintain readiness without assured deployment. Service providers under CWN agreements may face financial uncertainties due to the lack of guaranteed income, potentially leading to reduced investment in aircraft maintenance or acquisition. This situation can also result in the limited availability of air tankers when demand surges. For instance, in 2021, the Forest Service aimed to activate 16 CWN air tankers but could only secure five. The other tankers were contracted out overseas [16].

Wildland Fire Mitigation and Management Commission [2] has called for an evaluation of alternate VLAT/LAT ownership models: government vs. private-owned aviation assets. Furthermore, the commission called for developing a strategic framework and national performance measures in order to determine the appropriate or optimal number of aircraft.

Another option is to pool resources among countries [17]. A fleet could be managed by an appropriate United Nations office and funded by international contributions. In the event of any wildfire emergency, a subscribing member nation would have optional recourse to this fleet operated in coordination with their own national/state fire agencies.

4.3. Flight Operations

Daylight operations are consistent with wildfire fighting protocols and the nature of VLAT/LAT retardant drops. Retardant drops require VLATs and LATs to fly at low altitudes, often in rugged terrain, under the guidance of spotter aircraft. These precise maneuvers require maintaining visual contact with the ground and surrounding area and would naturally require Visual Meteorological Conditions (VMC). Also, fires generally

behave differently at night due to lower temperatures, potentially making large-scale drops less necessary compared to the intense fire behavior seen during the day.

4.4. Airport Operations and Characteristics

Airports that are used are determined by their proximity to the wildfires and their available capabilities. Particularly, west of the Rocky Mountains, airports with appropriate capabilities are within range of the location of the fires. However, there are questions about the geographic proximity and airport capabilities in other regions of the country. Notably, in 2024, there were airports used east of the Rocky Mountains that have traditionally not supported aerial fire-fighting operations: Maine, Louisiana, Texas, Illinois, Ohio, Minnesota, Wisconsin, North Carolina, and South Carolina.

4.5. Runway Length, Temperature and Retardant Capacity

The relationship between runway length, temperature, and density altitude is particularly important for aircraft departing at or close to maximum takeoff weight. Aircraft rely on the density of the air to generate lift and thrust. At higher elevations, the air density decreases, so at high elevations, the engines produce less thrust, and the wings generate less lift. The result is that aircraft need more runway length to achieve the necessary speed for takeoff or landing in thinner air because they require a longer distance to generate enough lift. A general rule of thumb is that for every 1000 feet of elevation above sea level, an airport generally requires about 5% to 10% more runway length to account for the reduced air density. Temperature is also a factor. Warmer air is also less dense than cooler air, so high temperatures (especially in summer) can have a similar effect to high altitude, requiring longer runways.

Runway length at airports at higher elevations during the summer months has been identified as an issue for the VLATS/LATS. In 2024, an estimated 5% of the flights at higher elevations airports were dispatched with up to 20% less retardant to account for temperature, elevation, and runway length.

For the top airports supporting aerial fire-fighting operations, the higher-elevation airports did not necessarily have the longest runways (Figure 9). In fact, several of the most used airports at higher elevations were the airports that experienced "downloading": Winslow (KINW), Prescott (KPRC), Silver City (KSCV), Rimona (KRNM), Porterville (KPTV), and McCall (KMYL).

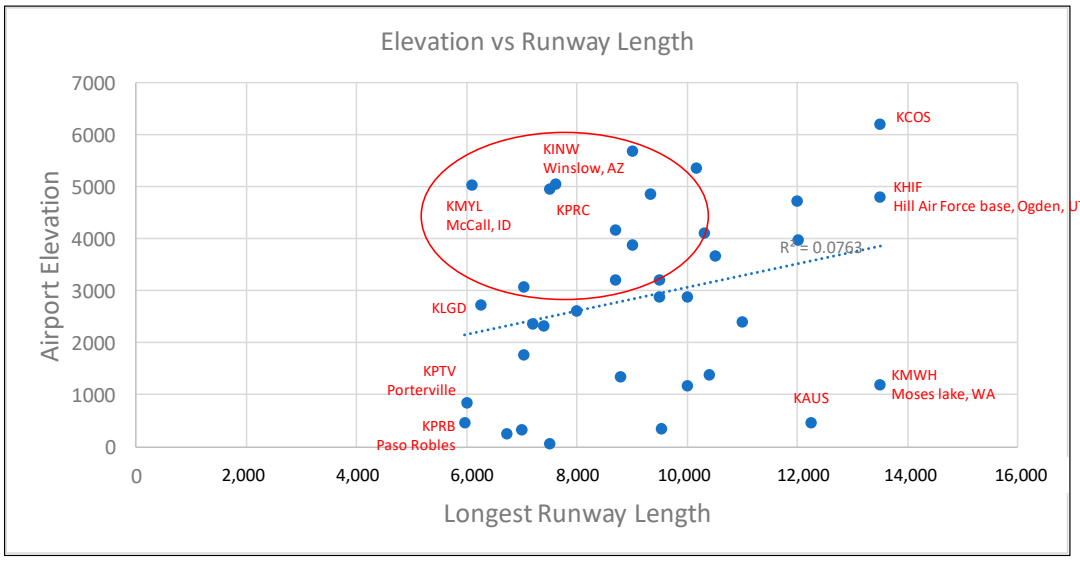


Figure 9. Runway length vs. airport elevation. Operations from airports at high elevations with shorter runways must reduce their retardant load in hot summer months.

4.6. Runway Weight Bearing

For air tankers, runway weight bearing is important as these aircraft carry significant weight when loaded with large amounts of retardant. Runways must be designed to handle these heavy loads to prevent runway damage, ensure safe takeoffs and landings, and maintain the overall safety and performance of the air tanker operations. Continuous high-frequency operations may lead to structural degradation. Many airports operated under waivers regarding weight-bearing capacity.

4.7. Airport Navigation Aides

Navigation aids for precision approaches are useful for VLAT/LAT operations. Although flights predominantly operate under VMC, there are scenarios in which the drop zone is VMS but the airport may experience reduced visibility due to smoke or low ceilings.

4.8. Ramp Congestion

Increased cargo and general aviation operations at air tanker airports have contributed to ramp congestion, which impacts turnaround times and operational efficiency.

4.9. Retardant Safety

Modern fire retardants are designed to be highly effective in wildfire suppression. The primary active ingredient in long-term fire retardants is ammonium phosphate, a compound widely used in agriculture. Once applied, fire retardant remains effective until it is removed by significant rainfall, at which point it breaks down and can act as a fertilizer for vegetation. To minimize any potential environmental impact, application guidelines include designated avoidance areas near waterways and sensitive habitats.

Fire retardants approved by the USFS do not contain intentionally added pre- or polyfluoroalkyl substances (PFAS) or other persistent chemicals, and the red color commonly seen in aerial drops comes from a fugitive dye that fades over time with UV exposure. This color helps ensure precise application, reducing redundant drops and improving efficiency.

4.10. Retardant Availability

A critical issue is ensuring that fire retardants are available at the right place and time to support aerial firefighting operations. An intricate supply chain infrastructure plays a vital role in the overall success of wildfire containment strategies The logistical complexity of this effort requires a strategic, multi-layered infrastructure to adapt to rapidly evolving fire conditions. To meet the demand, a network of multiple manufacturing and distribution centers are located across the U.S.

The logistical challenges of wildfire response require real-time coordination between manufacturing facilities, distribution centers, and frontline firefighting operations. Due to the unpredictability of wildfires, fire retardants cannot be stockpiled indiscriminately but must be strategically positioned for rapid deployment. Logistics teams must work around the clock to navigate transportation constraints, fluctuating fire behavior, and limited trucking capacity, ensuring that supplies reach critical locations without delay.

4.11. Water Availability for Retardant Loading

The availability of high-volume water sources was identified as a critical factor for efficient turnaround. Remote ramp space with easy access to water stands will be vital for sustaining LAT/VLAT operations in the future.

5. Conclusions

Wildfires are a key ecological process that maintains biodiversity and promotes ecological health in fire-prone regions. Nevertheless, when uncontrolled, wildfires can rapidly escalate, creating severe threats to ecosystems, human life, and infrastructure. The increasing frequency and intensity of these fires have led to a greater need for effective fire suppression strategies.

Over the past several decades, aerial firefighting has become an essential component of wildfire response, providing real-time reconnaissance and delivering strategic drops of fire retardant to suppress flames and protect threatened areas. However, these operations rely heavily on airport infrastructure and air traffic management systems to ensure efficient and safe deployment of firefighting resources.

This report provides a statistical analysis of the Very Large Air Tanker (VLAT) and Large Air Tanker (LAT) fleets contracted under the USFS MATOC program for the 2024 fire season. Data include the number of aircraft, flight operations, and airport utilization, and key performance metrics such as aircraft age, operational tempo, and the impact of runway specifications on firefighting efficacy. This information, which is not readily available, may be of use to airport planners, air navigation service providers, and policy makers.

The statistical results are dependent on the availability and accuracy of the data. Where possible, the data and results were verified by secondary sources and by subject matter experts.

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Abbreviations

The following abbreviations are used in this manuscript:

CWN	Call-When-Needed contract
EU	Exclusive-Use contract
LAT	Large Air Tanker
MATOC	Multiple Award Task Order Contracts
NPIAS	National Plan for Integrated Airport System
PCN	Pavement Classification Number
USFS	United States Forest Service
UTC	Coordinated Universal Time
VLAT	Very Large Air Tanker
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions

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