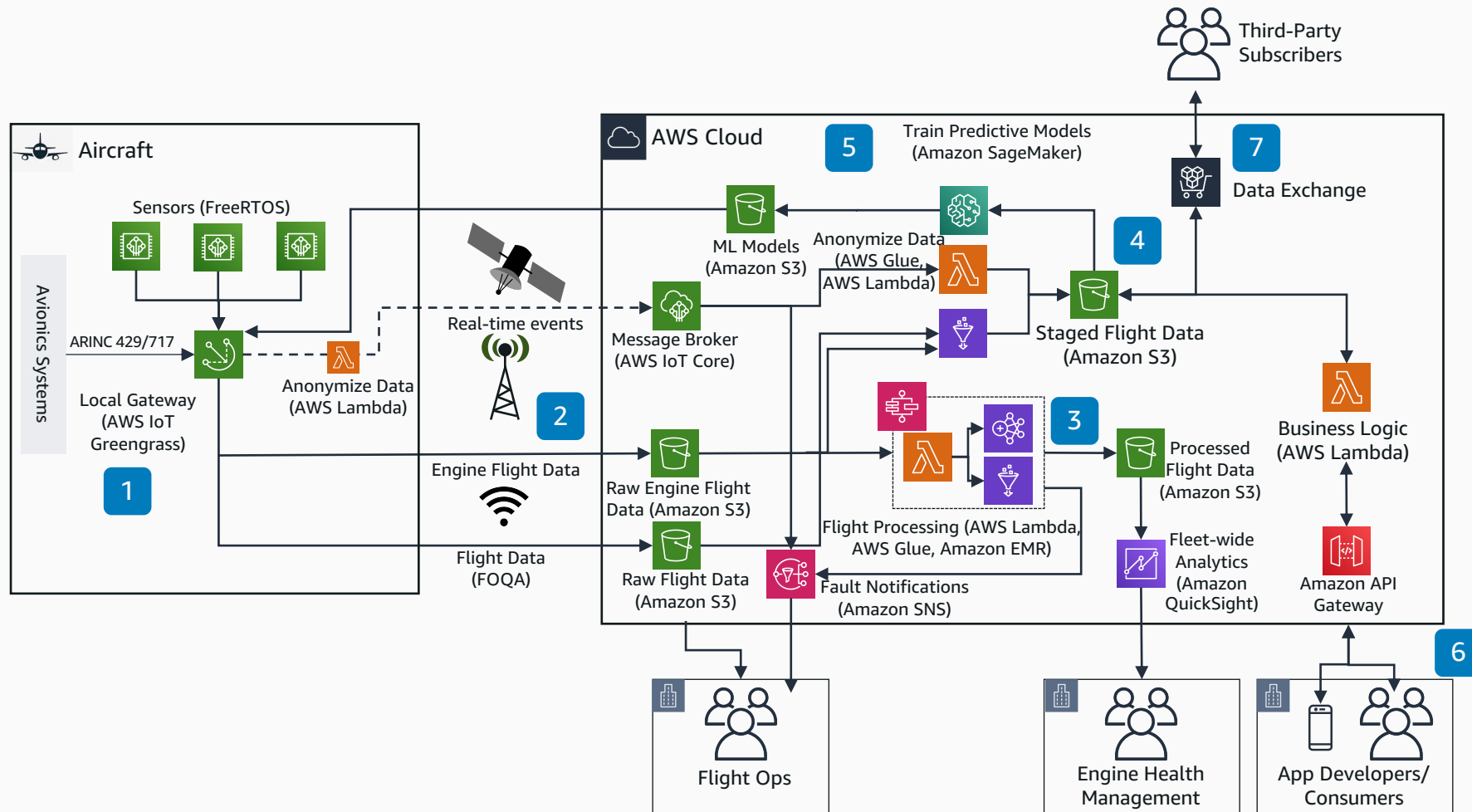


# Connected Aircraft

## Onboard flight data collection for fleet-wide analytics and predictive maintenance



- 1** Flight (avionics) and telemetry (sensor) data is collected by **AWS IoT Greengrass** running on the flight-data acquisition unit on board.
- 2** Real-time events are anonymized and sent to Flight Operations on the ground. Flight data is offloaded to **Amazon S3** with aircraft at the gate and analyzed by Flight Operations for fuel burn optimization, fault analysis and other use cases.
- 3** Engine flight data is processed and analyzed with **AWS Glue** and **Amazon EMR** for engine health maintenance.
- 4** Anonymized flight and fault data is aggregated and stored in a **Amazon S3** data lake.
- 5** Models trained from aggregated flight and fault data are deployed to **AWS IoT Greengrass** on the aircraft for predictive maintenance.
- 6** App developers build new digital solutions for the connected ecosystem.
- 7** Anonymized data is offered to third-party developers on a subscription basis with **AWS Data Exchange**.

