

# Student Workbook

D-310 Unit 6: Aircraft



**Summary:** This unit focuses on the Aircraft function as it relates to the Expanded Dispatch Support Dispatcher (EDSD) position.

# **Objectives**

#### Students will be able to:

- Describe the interaction of the Expanded Dispatch Support Dispatcher (EDSD) as it relates to the aircraft function.
- · Identify the difference between tactical and logistical missions.
- · Identify the different types of logistical aircraft requests.
- · Effectively utilize flight planning forms and methods.

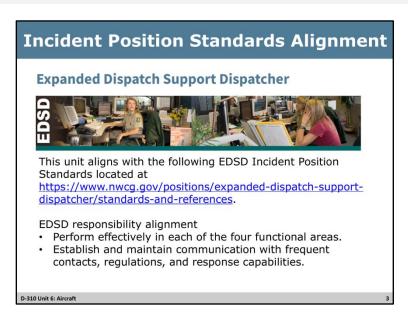
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#### **Unit Objectives**

- Describe the interaction of the EDSD as it relates to the Aircraft function.
- Identify the difference between tactical and logistical missions.
- Identify the different types of logistical aircraft requests.
- Effectively utilize flight planning forms and methods.

Note that this course will not prepare you to be an Aircraft Dispatcher (ACDP).

- Due to the complexity of the position, there is a separate training course available (D-312, Aircraft Dispatcher).
- Aircraft are specialized resources, much like equipment, crews, overhead, etc. As with other
  types of resources, aircraft have different specifications and capabilities and are used for specific
  purposes.
- Aircraft resources consist of airplanes (fixed-wing) and helicopters (rotor-wing), which are government owned, contracted, or hired for incident tactical and logistical support.
- Most aircraft functions will be dealt with by the local Initial Attack (IA) office. The EDSD is primarily responsible for coordinating with the aircraft desk on logistical transportation flights. For this class, all aircraft missions will be considered logistical in nature.



#### Responsibilities Addressed in Unit

- Perform effectively in each of the four functional areas.
- Establish and maintain communication with frequent contacts, regulations, and response capabilities.



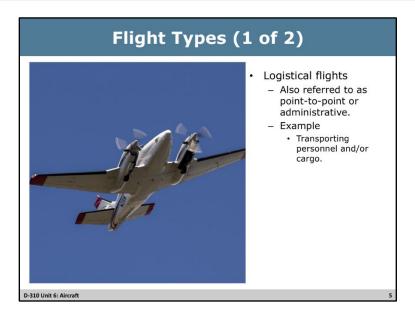


Giving and receiving information about mobilization and demobilization of resources using aircraft

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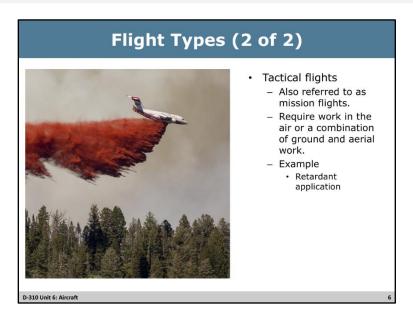
#### **EDSD Flight Planning Responsibilities**

- The EDSD flight planning responsibilities consist of determining the number of passengers/cargo, destinations, and time frames. This information is then passed to the ACDP, who will determine and coordinate flight plans.
- Duties may also include giving and receiving information about the mobilization and demobilization of resources using aircraft.
- Examples:
  - Using flight plans
  - Preparing flight requests
  - Checking the status of helicopter overhead orders



#### Flight Types (1 of 2)

- Logistical flights are also referred to as point-to-point flights or administrative flights. These flights originate at one airport or permanent helibase and fly directly to another airport or permanent helibase.
  - o Examples of logistical flights
    - Mobilizing crews on the National Interagency Coordination Center (NICC) jet
    - Mobilizing cargo or equipment between two established airports



#### Flight Types (2 of 2)

- Tactical flights are also referred to as mission flights. These are flights that require a combination of ground and aerial work.
  - o Examples of tactical flights
    - Reconnaissance
    - Mapping
    - Retardant application

# **Aircraft Types**

#### **Helicopters**

- Type 1
- Type 2
- Type 3

#### Fixed-wing aircraft

- Airtanker
- Single Engine Airtanker (SEAT)
- Lead plane

#### Other

- · Infrared (IR) requests
- Frequencies
- Temporary Flight Restrictions (TFRs)

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#### **Aircraft Types**

- Resources categorized as A numbers in the Interagency Resource Ordering Capability (IROC) system.
- One type of aircraft can be used for both logistical and tactical flights. For example, a fixed-wing aircraft could be used to mobilize overhead on a point-to-point (logistical) flight and later in the same day operate as an air attack (tactical) resource.
  - o Helicopters
    - Type 1
    - Type 2
    - Type 3
  - o Fixed-wing aircraft
    - Airtanker
    - Single Engine Airtanker (SEAT)
    - Lead plane
    - Smokejumper aircraft
    - Air attack
  - Other aircraft resources
    - Infrared (IR) requests
    - Frequencies
    - Temporary Flight Restrictions (TFRs)
    - Unmanned Aircraft Systems (UAS)

#### **Aviation Management: NICC**

#### Examples of NICC resources

- · Large transport aircraft
- National lead planes and aerial supervision modules (ASM)
- · Smokejumper aircraft
- Large and Very Large Airtankers
- Type 3 multi-engine water scooper
- Type 1 and Type 2 helicopters
- Modular Airborne Fire Fighting Systems (MAFFS)
- Military aircraft
- · IR aircraft
- · Frequencies

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#### **Aircraft Dispatch Levels: NICC**

- Each dispatch level handles different types of aviation resources. The roles of an EDSD vary at the three levels: NICC, Geographic Area Coordination Center (GACC), and local/expanded.
  - o NICC national resources
    - Large transport aircraft
    - National contract lead plane
    - Smokejumper aircraft
    - Airtankers
    - Type 1 and Type 2 helicopters
    - Modular Airborne Firefighting System (MAFFS)
    - Military aircraft
    - Aerial Supervision Module (ASM)
    - IR aircraft
    - Aircraft frequencies
    - Logistical charter aircraft

# Aviation Management: Geographic Area Coordination Center (GACC) and/or Local Examples of GACC resources TFRs Single engine air tankers (SEATs) Logistical aircraft Aircraft frequencies Fixed-wing aircraft Examples of local resources Fixed-wing aircraft Rotor-wing aircraft TFRs D-310 Unit 6: Aircraft

#### **Aircraft Dispatch Levels: GACC**

- GACC geographic area resources
  - o TFRs
  - SEAT
  - Logistical aircraft
  - o Aircraft frequencies
  - o Fixed-wing aircraft
- Local resources dispatch:
  - Fixed-wing aircraft
  - o Rotor-wing aircraft
  - o TFRs
  - Frequencies
  - o IR flights
- Aircraft ordering procedures which define the responsibilities of expanded dispatch should be established during your initial briefing. Expanded dispatch should maintain effective communication with the ACDP and IA office.
- Examples of EDSD duties related to aircraft:
  - Receiving and relaying logistical flight information (interpreting a flight plan)

Assisting ACDP with ordering aviation overhead

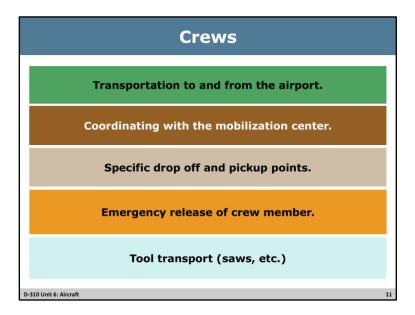
# Interaction Between Aircraft and Other Functional Areas



- Expanded dispatch may order resources to support aircraft.
- Communication with all functional areas is an essential part of a successful expanded dispatch operation.

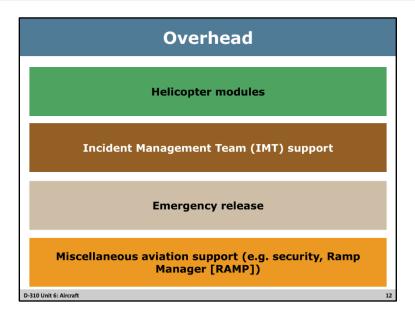
#### **Interaction Between Aircraft and Other Functional Areas**

- The EDSD may order resources to support the Aircraft function.
- Expanded dispatch may request a logistical flight.
- Communicating with all functional areas is an essential part of a successful expanded dispatch operation.
- Due to the safety and cost associated with aircraft orders, communicating information in a timely matter is extremely important.



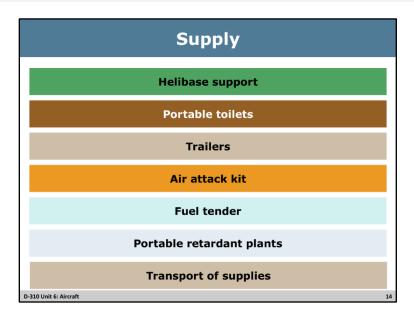
#### Crews

- Chartered aircraft arranged by NICC move several crews at a time (usually five).
  - o Transportation needs to and from the airport.
  - o Coordinating with the mobilization center.
  - o Specific drop off and pickup points at the airport (where the plane will park).
  - o An emergency release of a crew member might involve a charter.
  - o Transportation of tools and saws might involve a charter.



#### **Overhead**

- Helicopter modules:
  - o Every helicopter needs a manager.
  - o You may have limited involvement with agency helicopter orders.
  - o Close coordination between the overhead desk and the aircraft desk is essential.
  - o Incident Management Team (IMT) transport may involve a charter.
  - o Emergency release.
  - o Miscellaneous aviation support overhead (e.g., security, Ramp Manager [RAMP]).
- Refer to the *National Interagency Standards for Resource Mobilization*.



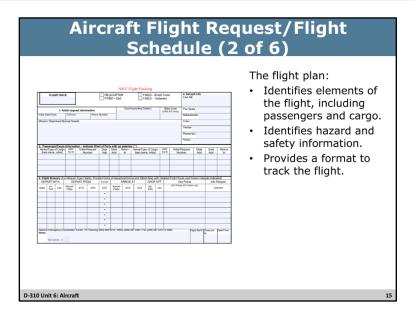
# **Supply**

- Helibase support
- Portable toilets
- Trailers
- Air attack kit
- Fuel tender
- Portable retardant plants
- Transport of supplies



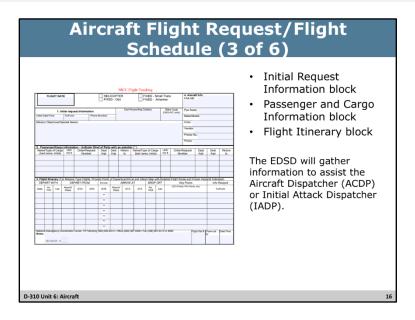
#### Aircraft Flight Request/Flight Schedule (1 of 6)

- The major factors to be considered for flight planning are:
  - o Safety.
  - o The right resource for the job.
  - Cost effectiveness.



#### Aircraft Flight Request/Flight Schedule (2 of 6)

- Flight planning
  - Flight planning is a step-by-step procedure that is completed prior to every logistical aircraft flight. The flight plan:
    - Identifies elements of the flight, including passengers and cargo.
    - Identifies hazard and safety information.
    - Provides a format to track the flight from the point of origin to the final destination.
  - o Flight plans are initiated utilizing an Aircraft Flight Request/Flight Schedule form.
  - o Refer to the Forms section of the NICC website.



#### Aircraft Flight Request/Flight Schedule (3 of 6)

- Flight planning variables
  - o Flight planning is a dynamic process involving many variables, such as:
    - Weather conditions.
    - Pilot and aircraft availability.
    - Airport options.
    - Delivery time frames.
    - Changing mission priorities.
  - To provide for safe and efficient flight planning, all parties must be flexible and remain objective.



#### Aircraft Flight Request/Flight Schedule (4 of 6)

- Flight request information blocks
  - o Initial Request Information
  - Charge Code
  - Mission Details



#### Aircraft Flight Request/Flight Schedule (5 of 6)

- Flight request information blocks
  - o Name/Cargo Type
  - Weight (WT) in pounds or cubic feet (both if possible)
  - o Project order and request number
  - Departure (DPT) and destination (DST) airports

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#### Aircraft Flight Request/Flight Schedule (6 of 6)

- Flight request information block
  - o Flight Itinerary
- Planning process
  - The planning process on the part of the EDSD involves gathering information, which will help the ACDP to develop the best flight plan.
  - The ACDP will complete the Flight Itinerary, Flight Following, and Radio Frequencies sections. The EDSD uses the flight itinerary for resource tracking.

# Flight Tracking

- The flight tracking information is critical in the event of an aircraft emergency.
- Flight tracking is done by the local Initial Attack (IA) office. Occasionally, the EDSD has some responsibilities.



#### **Flight Tracking**

- Flight tracking information is critical in the event of an aircraft emergency.
- While this is done by the local IA office, the EDSD has some responsibilities:
  - Relay any changes in personnel or cargo.
  - o Relay changes in ready-to-load (RTL) times.
  - o Relay changes in mission objectives/special needs.

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#### **Interpret Flight Itinerary**

- Airport identifiers
  - o Airport identifiers are Federal Aviation Administration (FAA) designated airport codes such as those provided in the following table.
  - o A good source for airport identifiers is <a href="www.airnav.com/airports/">www.airnav.com/airports/</a>.

BIL	Billings Logan International Airport, Billings, MT
LWT	Lewistown Municipal Airport, Lewistown, MT
GPI	Glacier Park International Airport, Kalispell, MT
O22	Columbia Airport, Columbia, CA

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#### **Common Acronyms**

- ATA = Actual time of arrival
- ATD = Actual time of departure
- **DPT** = Departure airport
- **DST** = Destination airport
- ETA = Estimated time of arrival
- ETD = Estimated time of departure
- **ETE** = Estimated time en route



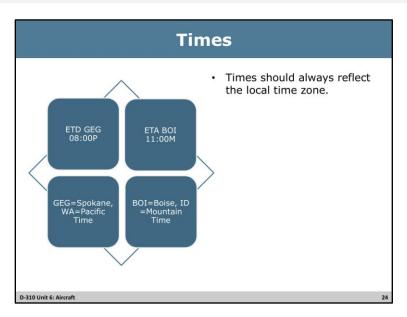
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#### **Common Acronyms**

- ATA = Actual time of arrival
- ATD = Actual time of departure
- D/O = Drop off
- DPT = Departure airport
- DST = Destination airport
- ETA = Estimated time of arrival
- ETD = Estimated time of departure
- ETE = Estimated time en route
- PAX = Passengers
- P/U = Pick up
- RON = Rest overnight
- RTL = Ready to load

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#### **Times**

• The times listed on Aircraft Flight Request/Flight Schedule forms should reflect the local time zone.

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#### Flight Manager Responsibilities

- Upon completion of the Aircraft Flight Request/Flight Schedule form, a flight manager will be designated.
- The flight manager is the agency representative for the flight operations. The flight manager may or may not be required to be on board the aircraft (depending on flight complexity).
- The flight manager may or may not be the chief of party indicated on the flight request/ schedule form.
- Primary duties:
  - Passenger safety
  - Completion of the flight invoice
  - Flight following/tracking with the dispatch office
- More than one flight manager may need to be designated if there are multiple destinations.
- The flight manager should receive a copy of the Aircraft Flight Request/Flight Schedule form and receive a briefing from the agency dispatcher.

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#### **Activity: Flight Planning**

**Overview:** This exercise consists of two parts, which refer to the different blocks on the Aircraft Flight Request/Flight Schedule form that an EDSD may use.

- Part 1 You will gather information from a resource order and input it into a blank Aircraft Flight Request/Flight Schedule form.
- Part 2 You will review a completed Aircraft Flight Request/Flight Schedule form and answer the questions in the workbook.

#### **Instructions:**

- Part 1 Instructions: In the Unit Resources section, use the Polebridge Resource Order to complete the Initial Request Information block and the Passenger and Cargo Information block on the Aircraft Flight Request/Flight Schedule form.
- Part 2 Instructions: Refer to the completed Polebridge Aircraft Flight Request/Flight Schedule. Interpret the Flight Itinerary block by answering the following questions:
  - O What is the tail number of the aircraft?
  - Who is the vendor?
  - What is the pilot's name?
  - O Who is the flight manager?
  - What is the routing of the first leg of the flight?
  - o How many passengers are on the second leg?
  - o What is the ETA of the third leg?
  - o Is there a time zone change?
  - What functions will the EDSD communicate with, and what information will be communicated?

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#### **Summary**

- The EDSD is responsible for determining the flight passengers/cargo, destinations, and time frames, then passing that information to the ACDP. The EDSD also gives and receives information about the mobilization and demobilization of resources using aircraft.
- Logistical flights fly directly between airports/helibases; tactical (mission) flights require a combination of ground and aerial work.
- Each dispatch level (e.g., NICC, GACC, local) handles different types of aviation resources.
- EDSDs communicate with Crews, Overhead, and Supply regarding aircraft mobilization.
- The Aircraft Flight Request/Flight Schedule form is completed prior to every logistical aircraft flight.
- The EDSD may have some responsibilities related to flight tracking.

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# **Unit Resources:**

- Polebridge Resource Order
- Aircraft Flight Request/Flight Schedule form (blank)
- Polebridge Aircraft Flight Request/Flight Schedule form (completed)

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