## ACADEMICS OF FLIGHT

# THE AIRCRAFT DISPATCHER

#### <u>HISTORY</u>

THE PROFESSION OF THE FLIGHT DISPATCHER HAS EVOLOVED WITH THE MANY CHANGES THAT THE AVIATION INDUSTRY HAS UNDERGONE. IN EARLY YEARS, IT WAS STANDARD PRACTICE FOR PILOTS OF COMMERICAL AIRLINES TO LOAD MAIL, PASSENGERS, AND CARGO INTO THEIR AIRPLANES. THEN, FLY FROM POINT A TO POINT B. THEY HAD NO PREPLANNED FLIGHT PLAN, LITTLE IF ANY WEATHER INFORMATION OR FIRM PLANS OF ACTION IN CASE CONDITIONS CHANGED ENROUTE. THE PILOTS, IN THOSE DAYS WOULD TAKE OFF AND HEAD IN THE GENERAL DIRECTION OF THEIR DESTINATION. THEY HAD NO MORE THAN A COMPASS AND KNOWN LANDMARKS TO HELP THEM ALONG THE WAY. IF WEATHER, MOUNTAINS, TREES, OR EVEN POWER LINES DIDN'T GET IN THEIR WAY, THE PILOTS WERE ABLE TO FIND THE AIRPORT. THE AIRCRAFT HAD VERY LITTLE NAVIGATION EQUIPMENT, NO USABLE COMMUNICATION EQUIPMENT. NOR DID THE AIRLINES HAVE ANY RELIABLE METHOD OF TRACKING FLIGHT PROGRESS FROM THE GROUND. AFTER YEARS OF INCREASING ACCIDENTS, WHICH WERE GROWING MORE COSTLY IN TERMS OF EQUIPMENT AND LOST LIVES, THE STATE AND FEDERAL AUTHORITIES SOUGHT TO PUT THE INDUSTRY ON SAFER GROUND THROUGH REGULATION.

IN 1938, CONGRESS PASSED THE CIVIL AERONAUTICS ACT. THIS LEGISLATION LAID DOWN STRICT REGULATIONS TO ENSURE THAT ALL AIR CARRIERS OPERATED IN AS SAFE A MANNER AS POSSIBLE. THE ESTABLISHING OF THIS ACT CREATED AN OPERATIONAL CONTROL STRUCTURE, CONSISTING OF A SYSTEM OF CHECKS AND BALANCES, WHICH, WHEN COMPLIED WITH, PRODUCED THE HIGHEST LEVEL OF SAFETY POSSIBLE FOR COMMERICAL AIRPLANE OPERATIONS. ONE RESULT OF THIS REGULATORY ACTION WAS THE CREATION OF A NEW AIRMAN CERTIFICATION, *THE AIRCRAFT DISPATCHER WAS CREATED*.

THE AIRCRAFT DISPATCHER IS A GROUND BASED, CERTIFIED INDIVIDUAL WHO, ACCORDING TO THE REGULATIONS, SHARES RESPONSIBILITY WITH THE PILOT FOR THE SAFE CONDUCT OF EACH FLIGHT. THE REGULATIONS HAVE BEEN MODIFIED, AMENDED, CONSOLIDATED, CLARIFIED, AND RE-CODED, BUT THE CONCEPT OF SHARED RESPONSIBILITY BETWEEN THE PILOT AND DISPATCHER FOR SAFETY HAS ALWAYS EXISTED. THIS CONCEPT IN REGULATION, HAS BECOME THE MODEL FOR MANY OTHER COUNTRIES WHICH HAVE ADOPTED SIMILAR REGULATIONS FOR AIR COMMERCE IN THEIR JURISDICTION. THE CONCEPT OF OPERATIONAL CONTROL HAS BEEN FOUND TO BE A SOUND ENHANCEMENT TO AIR SAFETY. THE AIRCRAFT DISPATCHER IS KNOWN BY MANY NAMES. AT SOME CARRIERS, THEY ARE KNOWN AS *FLIGHT CONTROLLERS* (NOT TO BE CONFUSED WITH AIR TRAFFIC CONTROLLERS) OF FLIGHT OPERATION'S OFFICER. NO MATTER WHAT THE NAME, THE FUNCTION IS THE SAME; *ENSURE COMPLIANCE WITH ALL APPLICABLE REGULATIONS, AND THE PURSUIT OF THE HIGHEST POSSIBLE LEVEL OF AIR SAFETY*.

IN 1944, AFTER WORLD WAR II HAD ALREADY DEMONSTRATED THE ABILITIES OF THE AIRPLANE TO GET PEOPLE FROM POINT TO POINT, ANOTHER STEP IN ESTABLISHING A STANDARD WAS TO CREATE THE INTERNATIONAL CIVIL AVIATION ORGANIZATION. ICAO IS AN ORGANZIATION OF NATIONS WHOSE PURPOSE IS TO STANDARDIZE INTERNATIONAL AVIATION REGULATIONS, AND TO PROPOSE RECOMMENDATIONS AND NORMS FOR ITS MEMBER STATES.

TODAY BY REGULATION, ALL UNITED STATES SCHEDULED AIRLINES OPERATING LARGE AIRCRAFT (MORE THAN 12,500 POUND GROSS TAKE OFF WEIGHT AND GREATER) ARE REQUIRED TO MAINTAIN AN APPROPRIATE NUMBER OF DISPATCH CENTERS STAFFED BY FAA LICENSED AIRCRAFT DISPATCHERS. THE DISPATCHERS IN THESE CENTERS MAINTAIN OPERATIONAL CONTROL OVER THOUSANDS OF FLIGHT SEGMENTS A DAY, THROUGHOUT NOT ONLY THE UNITED STATES, BUT, AROUND THE WORLD. THIS IS MADE POSSIBLE BY THE ADVANCES MADE IN RECENT YEARS IN TELECOMMUNICATIONS AND COMPUTER TECHNOLOGY. THE DISPATCHER HAS THE CAPABILITY TO DISCUSS THE OPERATION WITH THEIR FLIGHT CREW. COMPARED TO THE EARLY DAYS, WHEN THE BEST THE PILOT COULD DO, ON HIS OWN, WAS TO HEAD IN THE RIGHT DIRECTION. WE HAVE COME A LONG WAY. THE OVER ALL SAFETY RECORD OF THE INDUSTRY BEARS THIS OUT.

#### SAFETY AND RESPONSIBILITY

THE FIRST AND FOREMOST CONSIDERATION OF THE AIRCRAFT DISPATCHER IS SAFETY. THIS IS ACCOMPLISHED THROUGH COORDINATION WITH AN AGREEMENT OF THE CAPTAIN OF EACH FLIGHT UNDER HIS/HER CONTROL. NEXT, ON THE DISPATCHER'S LIST OF RESPONSILIBILITIES IS THE EFFICIENCY OF THE OPERATION, PASSENGER COMFORT AND CONVENIENCE, THE MAINTENANCE OF THE AIRLINE'S SCHEDULE, AND ACCOMODATION OF PAYLOAD. PREPLANNING OF THE OPERATION IS THE FIRST STEP IN THE PROCESS USED TO ENSURE THESE RESPONSIBILITIES ARE MET. THE DISPATCHER MUST BE CONSTANTLY AWARE OF THE CHANGING CONDITIONS WHICH EFFECT THE OPERATION. HE/SHE MUST BE PREPARED TO REACT TO THESE CHANGING CONDITIONS AND MODIFY THE PLAN IN AN APPROPRIATE WAY TO MAINTAIN SAFETY. ONCE THE PLANNED FLIGHT IS UNDER WAY, THE DISPATCHER IS REQUIRED TO MAINTAIN VIGILANCE OVER THAT OPERATION TO BE SURE IT REMAINS SAFE AND WITHIN THE BOUNDS OF REGULATION AN COMPANY POLICY.

UNDER REGULATIONS, IF THE DISPATCHER FEELS THE CONDITIONS WHICH ARE HAVING AN IMPACT ON THE OPERATION CANNOT BE SAFETLY ACCOMODATED, HE/SHE HAS THE AUTHORITY AND THE RESPONIBILITY TO DELAY OR CANCEL A FLIGHT WHICH HAS NOT DEPARTED. IF THE FLIGHT IS IN THE AIR, THIS RESPONSIBILITY EXTENDS TO REROUTING, STOPPING SHORT OF DESTINATION, OR DIVERTING THE FLIGHT TO A DIFFERENT AIRPORT.

#### RESPONSIBILITIES OF THE AIRCRAFT DISPATCHER

THE FOLLOWING IS A LISTING OF THE RESPONSIBILITIES AND DUTIES OF THE AIRCRAFT DISPATCHER:

- AUTHORIZE, REGULATE, CONTROL AND MONITOR COMMERCIAL AIRLINE FLIGHTS ACCORDING TO GOVERNMENT REGULATIONS, COMPANY POLICIES AND PROCEDURES TO ENSURE OPTIMUM SAFETY OF OPERATION OF EACH FLIGHT.
- ANALYZE AND EVALUATE METEOROLOGICAL INFORMATION, BOTH AT THE SURFACE AND ALOFT. DETERMINE THE POTENTIAL EFFECT OF ANY STORM SYSTEMS WHICH MAY BE PRESENT IN HIS/HER AREA OF RESPONSIBILITY. COLLECT AND EVALUATE ANY REPORTS OF FORECASTS OF TURBULENCE AND OR WIND SHEAR BOTH AT THE SURFACE AND ALOFT WHICH MAY POSE A POTENTIAL HAZARD TO SAFETY OF ANY FLIGHTS IN THE AREA.
- PROMOTE SAFETY, EFFICIENCY, AND SERVICE BY THE EXERCISE OF INITIATIVE AND SOUND JUDGEMENT IN ALL AREAS OF FLIGHT OPERATIONS.
- COMPUTE REQUIRED FUEL LOAD CONSISTNENT WITH REGULATIONS, REQUIREMENTS ACCORDING TO AIRCRAFT AND TYPE OF OPERATION, WEATHER, AND FIELD CONDITION REPORTS.
- PREPARE A FLIGHT PLAN CONTAINING INFORMATION SUCH AS MAXIMUM ALLOWABLE TAKE OFF WEIGHT, ROUTE OF FLIGHT, ALLOWABLE LANDING

WEIGHT, ALTERNATE AIRPORT IF REQUIRED, APPOPRIATE WEATHER, AND FIELD CONDITION REPORTS.

- PREPARE AND SIGN THE DISPATCH RELEASE, BASED ON THE INFORMATION DEVELOPED IN THE FLIGHT PLAN. THIS RELEASE IS THE DISPATCHER'S AUTHORIZATION FOR THE FLIGHT PLAN AND HOW THE FLIGHT IS TO BE CONDUCTED.
- DELAY OR CANCEL FLIGHTS IF CONDITIONS DEVELOP THAT WARRANT SUCH ACTION.
- MONITOR WEATHER AND FLIGHT PROGRESS, AND ADVISE CREW OF SIGNIFICANT CHANGES TO FLIGHT PLAN.
- RECOMMEND ALTERNATIVES TO THE FLIGHT PLAN, SUCH AS ROUTE AND ALTITUDE CHANGES, REDISPATCHING TO A DIFFERENT DESTINATION OR ANY OTHER ENROUTE AMENDMENTS AS REQUIRED BY EXISTING CONDITIONS.
- CORRDINATE BETWEEN THE FLIGHT CREW AND OTHER COMPANY DEPARTMENTS P L U S GOVERNMENT AGENCIES TO EFFECT CHANGES TO THE PLAN WHEN NECESSARY FOR OPERATIONAL OR SAFETY REASONS.
- ORIGINATE, DISSEMINATE, AND MAINTAIN CURRENT FLIGHT INFORMATION FOR USE BY STATIONS AND RESERVATIONS, OR OTHER DEPARMENTS, WITHIN THE AIRLINE FOR THE MAINTENANCE OF THE AIRLINE'S SCHEDULE.

### **QUALIFICAITONS AND TRAINING**

THE MINIMUM AGE, KNOWLEDGE, AND EXPERIENCE REQUIREMENTS FOR OBTAINING AN FAA AIRCRAFT DISPATCHER CERTIFICATE ARE DEFINED IN FEDERAL AIR REGULATION PART 65. A CANDIDATE FOR THIS CERTIFICATE MUST BE AT LEAST 23 YEARS OF AGE AND MUST COMPLETE AN FAA APPROVED TRAINING COURSE, OR HAVE SPENT SEVERAL YEARS IN AN AIRLINE OPERATIONS RELATED CAPACITY. QUALIFICATION FOR THIS CERTIFICATE IS DETERMINED BY BOTH A WRITTEN AND PRACTICAL EXAMINATION. THIS WRITTEN EXAM CLOSELY RESEMBLES THE AIRLINE TRANSPORT PILOT'S EXAM WHICH IS THE MOST DIFFCULT OF PILOT RATINGS. THE PRACTICAL EXAM IS USED TO EVALUATE THE CANDIDATE'S WORKING KNOWLEDGE OF THE OPERATIONAL RESTRICTIONS SUCH AS THE MINIMUM EQUIPMENT LIST. ONCE THE CERFTIFICATE IS ISSUED, IT IS VALID FOR LIFE, UNLESS REVOKED OR SUSPENDED.

OBTAINING THE AIRCRAFT DISPATCHER'S CERTIFICATE ONLY STARTS THE LEARNING PROCESS FOR THE DISPATCHER. BEFORE, HE/SHE EVER AUTHORIZES AN OPERATION, THE NEW DISPATCHER MUST FIRST PASS INITIAL TRAINING GIVEN BY THE AIRLINE. THIS TRAINING INCLUDES ALL THE AIRCRAFT SYSTEMS FOR WHICH THEY WILL BE RESPONSIBLE, COMPLETE FAMILIARITY WITH ALL FAA REGULATIONS AND COMPANY POLICIES AND PROCEDURES. THE NORMAL TRAINING ALSO INCLUDES EXTENSIVE ON THE JOB TRAINING WITH AN EXPERIENCED DISPATCHER.

IN ADDITION TO THE INITIAL TRAINING, EVERY DISPATCHER IS REQUIRED TO UNDERGO ANNUAL RECURRENT TRAINING ON EACH AIRCRAFT TYPE THEY DISPATCH. ALSO, EVERY YEAR, THE DISPATCHER IS REQUIRED TO OBSERVE OPERATIONS FROM THE COCKPIT. WHENEVER NEW AIRCRAFT ARE ENTERING SERVICE, THE DISPATCHER MUST ATTEND TRANSITION TRAINING ON THAT AIRCRAFT.

WITH THE ADVENT OF MORE TWO MAN COCKPIT AIRCRAFT, THE ROLE OF THE DISPATCHER IS GAINING IN IMPORTANCE. THE DISPATCHER IS ACTUALLY BECOMING THE "THIRD MAN" IN THE COCKPIT FROM A RESOURCE STANDPOINT. THIS ROLE WILL CONTINUE TO GROW IN THE FUTURE.