National Air Transportation Association

Refueling and Quality Control Procedures for Airport Service and Support Operations

Table of Contents

Forward

My name is Jim Coyne, and I am president of the National Air Transportation Association (NATA).

NATA, the voice of aviation business, is the public policy group representing the interests of aviation businesses before the Congress, federal agencies and state governments. NATA's over 2,000 member companies own, operate and service aircraft and provide for the needs of the traveling public by offering services and products to aircraft operators and others such as fuel sales, aircraft maintenance, parts sales, storage, rental, airline servicing, flight training, Part 135 on-demand air charter, fractional aircraft program management and scheduled commuter operations in smaller aircraft. NATA members are a vital link in the aviation industry providing services to the general public, airlines, general aviation and the military.

One of NATA's largest membership groups is composed of fixed base operators (FBOs). FBOs are the primary business entities that provide fuel service to the general aviation fleet and are, therefore, the leading contributor to aviation fuel quality. The consistent quality of fuel that is provided by our nations FBOs is a testament to the many line service technicians, supervisors and managers who, together, spend hours maintaining, testing and operating fuel handling equipment.

This publication has been produced for those dedicated individuals, and brings together information from a wide variety of sources into one comprehensive guide. The 2011 revision is a complete rewrite that is based on the most current industry standards.

NATA is dedicated to providing the resources that our members need to succeed and to helping general aviation as an industry continue to lead the world in service, safety and innovation!

James Coyne
President
National Air Transportation Association

Introduction

Every day, millions of gallons of aviation fuel are pumped into a wide range of general aviation aircraft. Each and every time a gallon of fuel is transferred from a refueler to an aircraft, the potential for disaster exists. The risks of fuel spills, fire, fuel contamination, misfueling and personal injury are always present; however, actual accidents and injuries are relatively rare. This is not a coincidence! Since the inception of aviation in America, our industry has worked tirelessly to advance safety. We have developed safer equipment and better procedures and continue to do so.

Aviation fuel handling and quality control are one of the few areas in our industry that is not directly regulated by the federal government. Rather, industry standards, developed over many years, and indirect regulation from federal, state and local government dictate our policies and procedures. Some of the industry standards have been in place for decades, while others were developed more recently in response to incidents and accidents.

When learning about fuel handling and quality control procedures, the first concept that must be understood is the quality control chain. An individual control procedure, such as regularly checking filter differential pressure, may not seem to provide much protection against fuel quality issues, but when viewed with the many other overlapping procedures the strength of

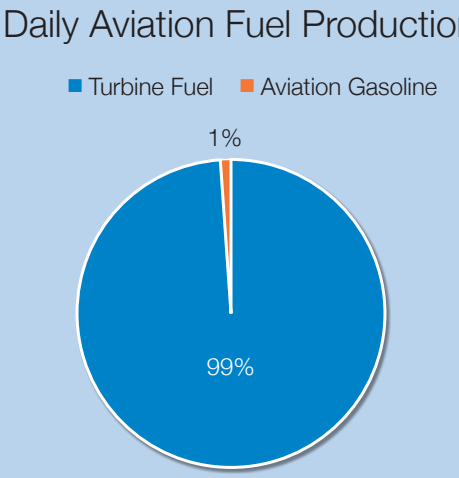
the system becomes evident. The quality control chain begins when the fuel is produced at the refinery and is continued through transportation, delivery to the airport, storage and finally delivery into the aircraft.

As you read this guide, take the time to see how the many different inspections and procedures overlap to provide coverage so a failure in one area does not result in poor quality fuel being delivered to an aircraft.

Also, remember that it is not the policies and procedures that make the system so successful, it is the people who implement them. Professionalism, attention to detail and dedication are displayed by the thousands of individuals who, every day, ensure that the aviation fuel delivered to their customers is clean, dry and on-specification!

DID YOU KNOW?

In 2008, there were over 63 million gallons of aviation fuel produced each day in the United States. Of that amount, 62.7 million gallons were turbine-engine fuel and 630 thousand gallons were aviation gasoline.



National Air Transportation Association
4226 King Street, Alexandria, VA 22302

Refueling and Quality Control Procedures for Airport Service and Support Operations

Printed in the United States of America

Photography by Jeremy Keegan