

July 7, 2017

## Weight and Balance Study Errata

### I. ACCIDENT

Location: Bloomington, Illinois  
Date: April 7, 2015  
Time: 0006 central daylight time (CDT)  
0506 coordinated universal time (UTC)  
Airplane: N789UP, Cessna 414A modified in accordance with available  
STC's for engines, spoilers, winglets, and vortex generators

### II. VEHICLE PERFORMANCE SPECIALIST

Kevin J. Renze, Ph.D.  
Vehicle Performance Division, RE-60  
National Transportation Safety Board (NTSB)

#### 1.0 INTRODUCTION

On April 7, 2015, about 0006 central daylight time, a Cessna model 414A twin-engine airplane, N789UP, was substantially damaged when it collided with terrain following a loss of control during an instrument approach to Central Illinois Regional Airport (BMI), Bloomington, Illinois. The airline transport pilot and six passengers were fatally injured. The airplane was owned by and registered to Make It Happen Aviation, LLC, and was operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 while on an instrument flight rules (IFR) flight plan. Night instrument meteorological conditions prevailed for the cross-country flight that departed Indianapolis International Airport (IND), Indianapolis, Indiana, at 2307 central daylight time.

#### 2.0 CONTENT CORRECTIONS

In Section 2.9 of the original Weight and Balance Study, the word “pounds” should be changed to “gallons” in the first sentence that states,

“The average fuel burn rate of 47.36 pounds per hour was checked by estimating the expected fuel burn for each flight segment for the preceding flight from BMI to IND and the accident flight from IND to BMI.”

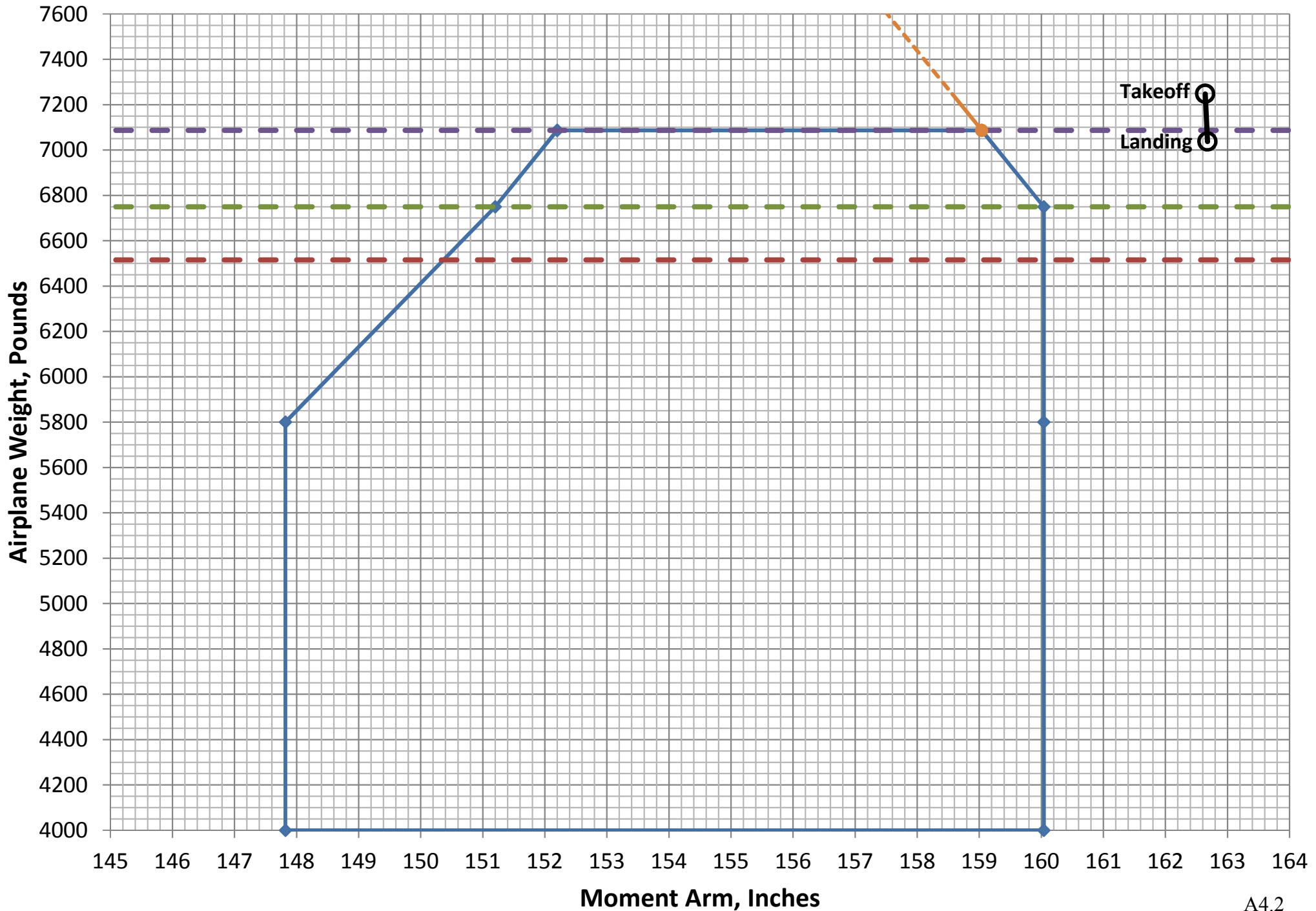
The corrected content is:

“The average fuel burn rate of 47.36 gallons per hour was checked by estimating the expected fuel burn for each flight segment for the preceding flight from BMI to IND and the accident flight from IND to BMI.”

In attachment 4 of the original Weight and Balance Study, the maximum zero fuel weight (MZFW) value plotted on pages A4.2–4 was 6,200 pounds. The correct MZFW value that should be plotted on each of these pages is 6,515 pounds. The respective corrected pages are attached.

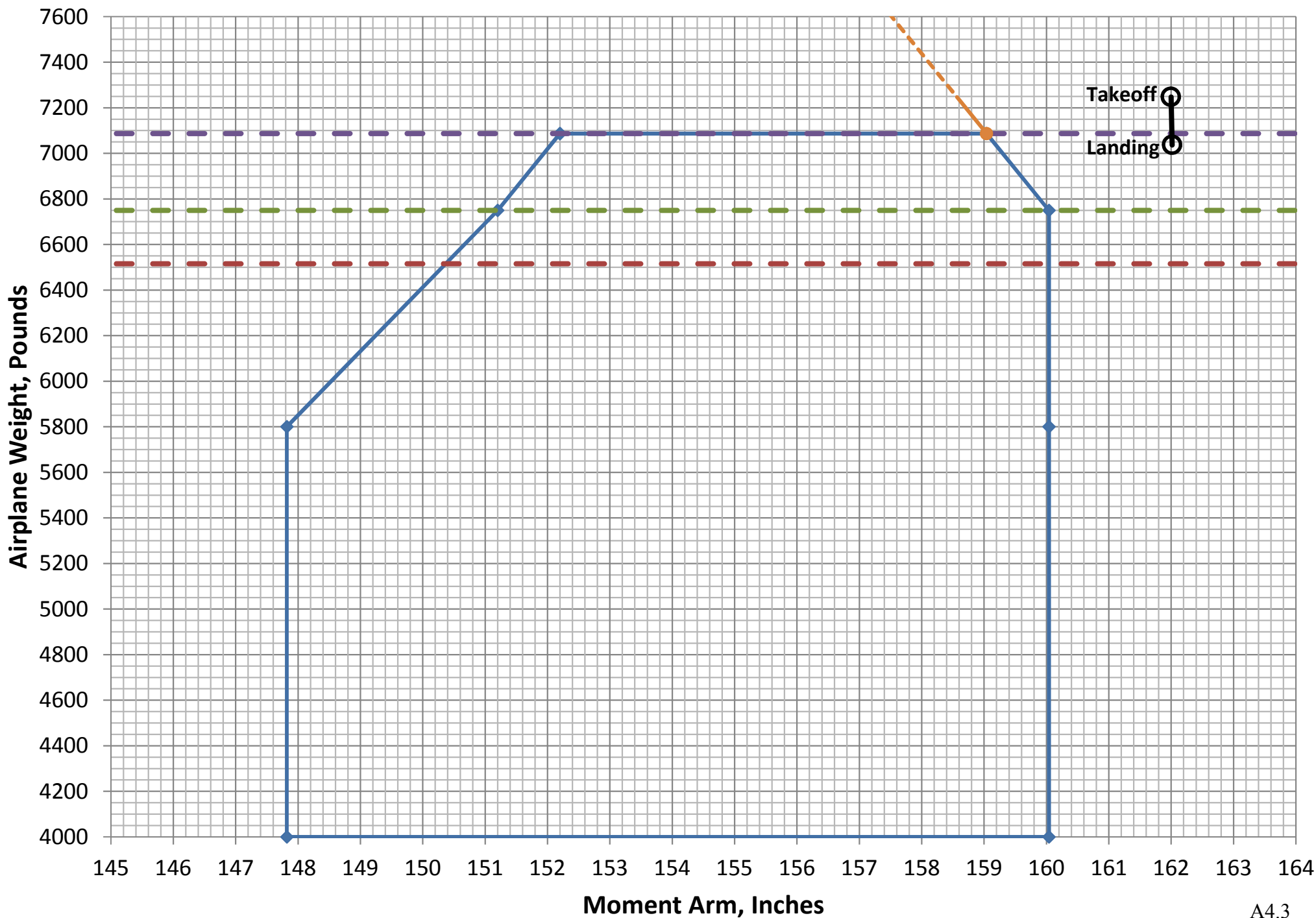
# N789UP Weight and Balance, BMI to IND (Passenger Loading Same as Accident)

Envelope MZFW MLW MTOW Preceding Flight Extrapolation



# N789UP Weight and Balance, BMI to IND (Passenger Loading For Most Forward CG)

Envelope MZFW MLW MTOW Preceding Flight Extrapolation



# N789UP Weight and Balance, IND to BMI (Accident Flight)

Envelope MZFW MLW MTOW Accident flight Extrapolation

