737 300/400/500 (Includes GTCP and APS APUs)

General Familiarization

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Details:

This book is a study guide for the Boeing 737 Aircraft and includes ATA Chapters 49 for both the GTCP and APS Auxiliary Power Units. This book is a great tool for review, refresher, new hires, pre-requisite training, and preparation for systems level classes. There are many benefits for students, technicians, teachers, MRO Training Departments, and Airlines alike. With self-paced study, training time does not need to conflict with your billable time!

How to Enroll in the Certification Program:

You can convert this Study Guide to the AeroEd certificate program, which will award you with an official **Certificate of Completion** and the opportunity to collect 40 hours of **FAA AMT Awards Credits**. Successful completion of this course qualifies for 40 hours FAA AMT Awards Program credit for an FAA certificated mechanics or repairmen, technicians, instructors, and students. All materials required for registration are included in the available Certificate Packet. For more information on the program contact your local FSDO Airworthiness Safety Program Manager.

The General Familiarization that this course provides can serve as the springboard for Systems classes and a deeper level of detail. Just contact AeroEd and we will get you started. For the incremental cost of the program you will receive the following items in the Certification Packet: a set of tests or online test login, a registration number, and an online account to track your Chapter Scores and Mastery Results. Upon successful completion, you will receive a Certificate of Completion and registration information for the FAA AMT Awards Program.

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B737-300/400/500 GENERAL FAMILIARIZATION SELF-PACED

This course covers an overview of the Mechanical Systems to include:

- Description and Operation
- Controls and Indications
- Component Location
- Servicing

OBJECTIVES

On completion of this training, using the study guide provided and appropriate Maintenance Manuals, the student will be able to:

1) Describe the safety precautions to be observed when working on or near the aircraft and its systems
2) Describe the locations of principle components
3) Describe the normal functions of each major system, including terminology and nomenclature
4) Using the proper maintenance manual reference, perform all aircraft system servicing tasks
5) Interpret reports provided by the crew members

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Horizontal Stabilizer

ELEV STA: Elevator Station: A plane that is perpendicular to the elevator hinge centerline. It is measured from the intersection of the elevator hinge centerline and stabilizer buttock line 0.00.

FS STA: Front Spar Station: A plane that is perpendicular to the horizontal stabilizer front spar. It is measured from the Front Spar Station 0.00, the intersection of the front spar and trace of body buttock line 0.00 at the horizontal stabilizer reference plane.

HSBL: Stabilizer Buttock Line: A plane that is perpendicular to the horizontal stabilizer reference plane and parallel to the trace of the fuselage centerline. It is measured from stabilizer buttock line 0.00, the intersection of horizontal stabilizer reference plane and body buttock line 0.00.

SCP: Stabilizer Chord Plane: A plane through the trailing and leading edges of the stabilizer airfoil.

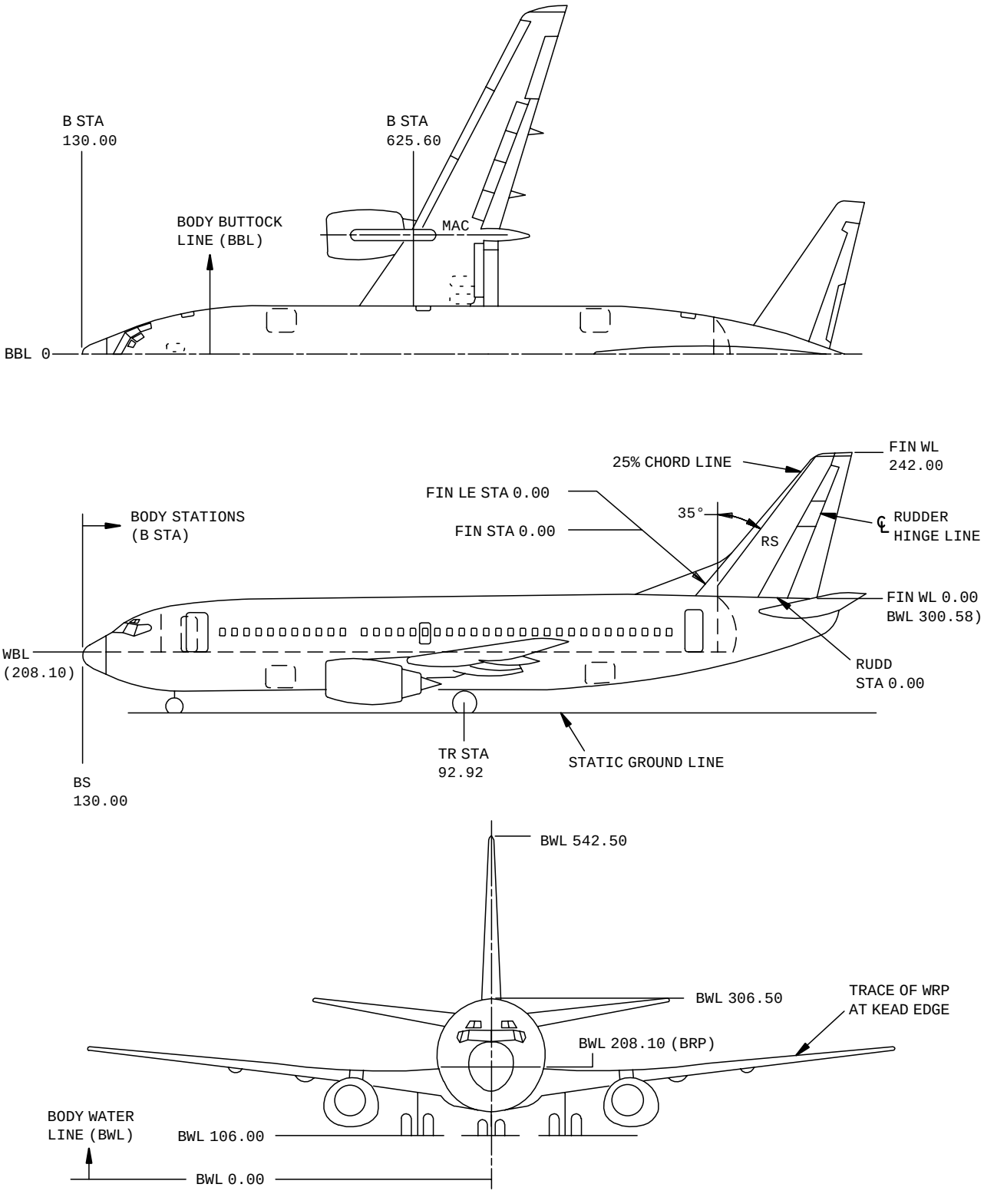
LE STA: Leading Edge Station: A plane that is perpendicular to the horizontal stabilizer leading edge. It is measured from the Stabilizer Leading Edge Station 0.00, the intersection of the leading edge line extension and stabilizer buttock line 0.00.

RS STA: Rear Spar Station: A plane that is perpendicular to the horizontal stabilizer rear spar. It is measured from the Rear Spar Station 0.00, the intersection of the rear spar and the trace of body buttock line 0.00 at the horizontal stabilizer reference plane.

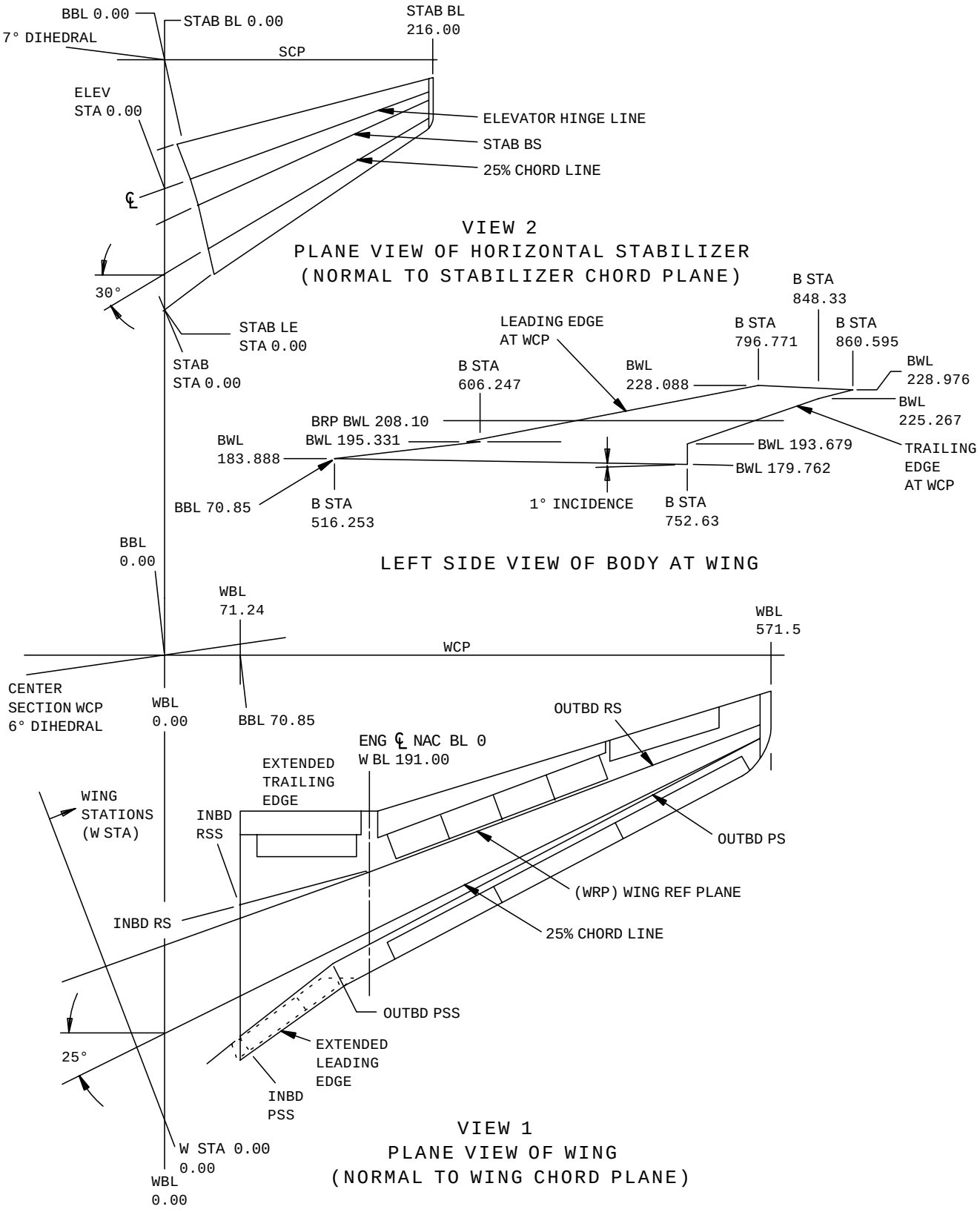
STAB STA: Stabilizer Station: A plane that is perpendicular to the stabilizer rear spar and horizontal stabilizer reference plane. Stabilizer station 0.00 is at the intersection of the leading edge extension, body buttock line 0.00 and the horizontal stabilizer reference plane.

Nacelle

NAC BL: Nacelle Buttock Line: A plane parallel to a wing buttock line. Nacelle buttock line 0.00 is equivalent to wing buttock line 191.00



Reference Planes and Lines



Reference Planes and Lines

PRINCIPAL DIMENSIONS AND AREAS

Overall Airplane

- Length - 109 feet-7 inches (737-300)
- Length - 119 feet-7 inches (737-400)
- Length - 101 feet-9 inches (737-500)
- Width - 94 feet-10 inches
- Height (vertical stabilizer tip, top of the fairing to the ground) - 36 feet-6 inches

Wing

- Root Chord (theoretical, at the body centerline) - 288.09 inches
- Basic Chord (theoretical) - 186.72 inches
- Tip Chord (theoretical) - 63.83 inches
- Planform Taper Ratio
- Dihedral (wing reference plane with respect to the body reference plane) - 6 degrees
- Sweepback (25 percent chord line) - 25 degrees
- Aspect Ratio - 9.16
- Mean Aerodynamic Chord (basic wing only) - 134.46 inches
- Body Station at 0% MAC - 625.60

Horizontal Stabilizer

- Tip chord (theoretical) - 60 inches
- Sweepback (25 percent chord line) - 30 degrees
- Dihedral (horizontal stabilizer reference plane with respect to the body reference plane) - 7 degrees
- Aspect Ratio - 4.04

Vertical Stabilizer

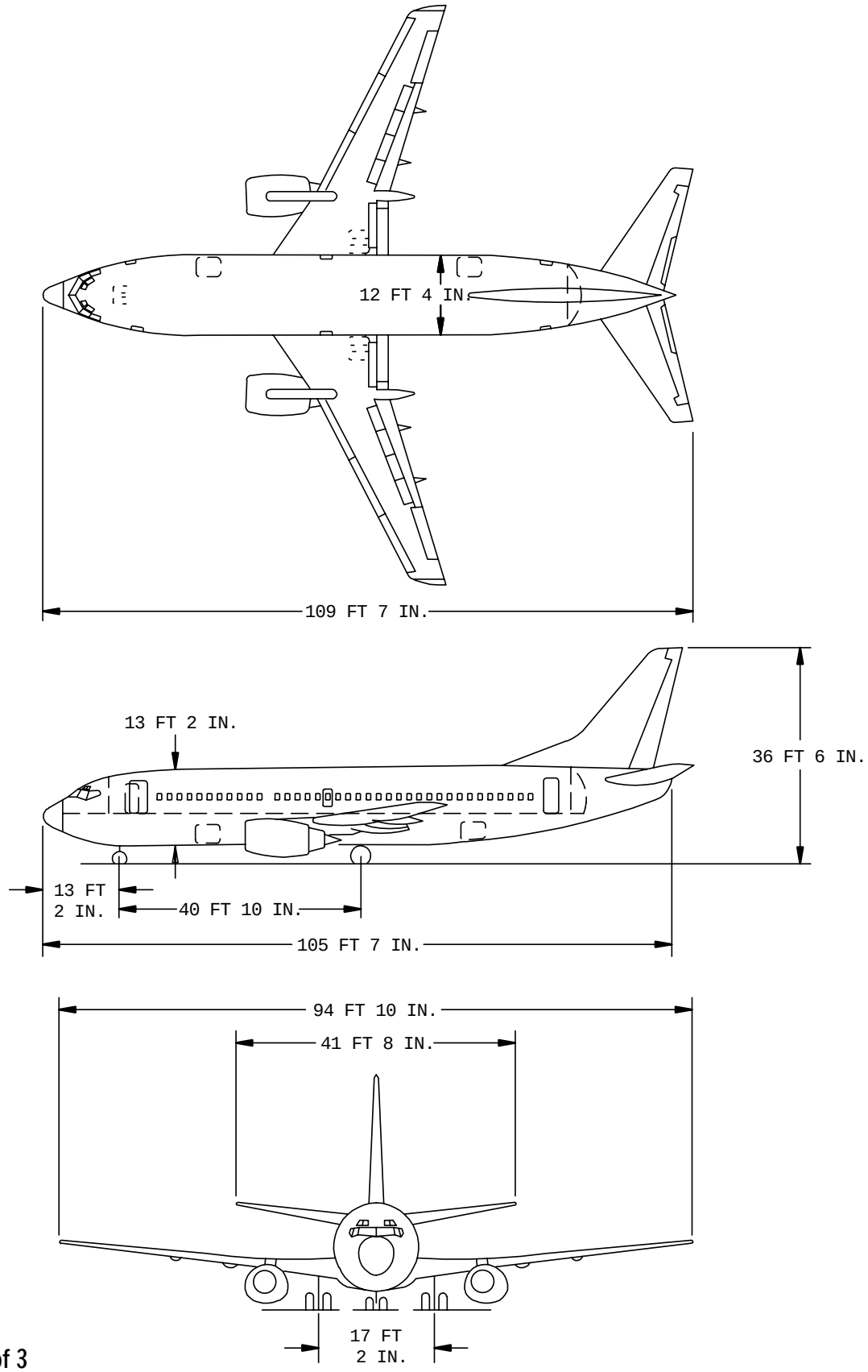
- Height - inches
- Root Chord (theoretical, leading edge at body station 971.81) - 205 inches
- Sweepback (25 percent chord line) - 35 degrees
- Aspect Ratio - 1.81

Fuselage

- Height of the body reference plane (top of the floor beam WL 208.10) above the ground at the main gear - 102.10 inches
- Height (constant cross section) Above the body reference plane - 98.4 inches Below the body reference plane - 59.60 inches
- Height to the centerline of the windows above the body reference plane - 38 inches
- Length - 1267 inches (737-300)
- Length - 1387 inches (737-400)
- Length - 1173 inches (737-500)

Areas

- Wing (basic) - 980.0 square feet
- Horizontal Stabilizer Surfaces (total, with the area in the fuselage) - 545 square feet
- Vertical Stabilizer Surfaces (total) - 370 square feet



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