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| **Tomas J. Carrasquel** | United States, Maryland, 20886  [tomasj.carrasquel11@gmail.com](mailto:tomasj.carrasquel11@gmail.com) • 757.775.6288 |

U.S. Citizen • 10-Point Veterans Preference

# Job Title

*A former military member with six years of experience as a Blackhawk UH-60 Helicopter Mechanic, who is a dedicated, passionate, and eminently qualified Aviation Aerospace Mechanical/Maintenance Technician. Holder of an Associate degree in Construction Technology, and one in Architecture, coupled with certifications in Computer Aided Drafting and Design (CADD). Currently attending Montgomery College for Mechanical and Aerospace Engineering and enrolled BYU Idaho, Brigham Young University Worldwide for Computer Aided Design Certifications.*

*More than seven years of experience as a CADD Drafter/Designer, (CREO, SolidWorks, CATIA, AutoCAD). Skilled in cultivating and nurturing positive camaraderie and strategic relationships using attentive listening and clear oral communication skills. Well-versed in managing, leading, and working well with people from diverse backgrounds. Bilingual: English and Spanish.*

# WORK EXPERIENCE

**Infotree Global Solutions, Corp/EATON Corp Aerospace Group**, Beltsville, MD USA.

Supervisor: Joe Dunn, (667) 300-8518. Hours Per Week: 40-50.

##### **Maintenance Technician** (09/2019 – 03/2020)

Held accountable for completing mechanical system testing, troubleshooting, repairing, maintaining machinery as dictated by manufacturer manuals, diagrams, schematics, and sketches. Help the Electrician as needed to troubleshoot/repair electrical systems. Independently and safely operate metalworking tools such as lathes, drill presses, and grinders to fabricate and repair parts.

Use advanced skills and knowledge to conduct in-depth evaluations of facilities; identify/source parts and supplies; and repair items to ensure key improvements are accurately completed. Perform preventative maintenance and analyze systems to identify root causes of issues; ensure repairs are accurately and quickly effected. Efficiently dismantle devices and remove defective parts. Adjust functional parts as needed, and repair/replace defective parts. Test devices to ensure optimal performance.

Selected Contributions:

* Implemented sequential write ups arrangement record during repairs for better recognition of steps and tasks performed on industrial equipment and assemblies for purposes of having a more effective follow up record highlighted as an example for the rest of team.

**PGS Worldwide/Northrop Grumman/ Space Components Div.**, Beltsville, MD USA.

Supervisor: Patrick Lindsay, (816) 872-8260. Hours Per Week: 40-55.

##### **Spacecraft Mechanical Technician** (06/2019 – 09/2019)

Supported the fabrication of complex spacecraft heat exchangers for NASA, military, and commercial spacecraft. Operated pneumatics systems equipment for mechanical assembly and testing of heat exchanging systems. Fabricated precision small scale metal and assemblies at low fabrication tolerances for high precision fabrication purposes, with utmost dedication and patience for detail and consistency using hand tools, tubing benders and calibrated gauges. Completed metalwork including forming and fabrication; performed low tolerance cutting, shredding, bending, and flattening of various types of metal extrusions, metallic screens, and profiles.

Performed all assigned tasks aligned with SOPs and processes; faithfully interpreted/followed written manufacturing instructions and technical procedures, blueprints, and engineering drawings and sketches. Worked from engineering-controlled documents, shop aids, and templates. Safely handled hazardous materials in compliance with OSHA and industry standards, utilizing required PPE at all times.

Selected Contributions:

* Implemented effective unique craftsmanship cutting and metal forming techniques on very detailed-patience-oriented tasks for the manufacture of key component assemblies on spacecraft heat dissipation loop systems and reduced material loss by 20%.

**United States Army**, 2nd Battalion (Assault), 10th Aviation Regiment "Knighthawks"19900 Munns Corner Rd, Fort Drum, NY 13603, and Multiple Locations.

Supervisor: Matthew W Braman, (912) 604-5507. Hours Per Week: 40-72.

**15T-Helicopter Mechanic UH-60 Blackhawk/Ground Support Equipment Coordinator** (08/2009 – 05/2015)

Oversaw the repair/maintenance of ~73 helicopters, Blackhawks, Apaches, Chinooks, and unmanned aircraft vehicles, the largest aviation task force in the US Army/Afghanistan. Managed and facilitated training for a team of six people on standard maintenance operating procedures for helicopters and related equipment. Successfully eliminated defective equipment and installed aircraft subsystem assemblies including engines, rotors, gearboxes, transmissions, and mechanical flight controls.

Performed aircraft inspections and maintenance; serviced and lubricated aircraft and subsystems; helped diagnose/troubleshoot/analyze operational issues. Responsible for maintaining and tracking tools, maintenance equipment, aviation, and electrical, hydraulic. and pneumatic power equipment valued at $1M, for aviation aircraft support.

As the Ground Support Equipment Coordinator, supported ~30 aircraft including the AH-47 Apache Combat Helicopter. Efficiently operated/maintained the aviation ground power unit and the general aviation nitrogen generator.

Selected Contributions:

* Responsible for the safety/readiness of UH-60 Helicopters for US Army missions; achieved 100+ successful flights with zero losses.
* Received distinction as the Unit with the largest aviation task force in Afghanistan.
* Chosen by leadership to fill an Officer position, tasked with managing the Aviation Ground Support Equipment Department based on superior organization, coordination, and planning abilities.

**Solid Manufacturing Solutions, Inc.**, Coral Springs, FL USA. Supervisor: Rick Morgan, (954) 263-4526. Hours Per Week: 15-25.

##### **CAD Drafter** (12/2008 – 04/2009)

Accountable for reverse engineering and manufacturing for fluid system mechanics. Performed in-depth analyses and detected design deficiencies and pressure failures with battery assemblies and electrical motors for water immersed and floating devices. Designed/generated CAD virtual prototyping from original physical system assembly to virtual modeling assembly using SolidWorks for testing. Incorporated modifications aligned with engineering designs.

Selected Contributions:

* Successfully accomplished purposes of design for further manufacturing with lead engineer.

**EMS-Eastern Metal Supply, Inc.**, Lake Worth, FL USA. Hours Per Week: 40-45.

##### **Prototype Manufacturing Department Lead Design CAD/CAM Coordinator** (03/2008 – 11/2008)

Liaised between the company’s owner and manufacturing; cultivated/nurtured positive working relationships. Worked with the owner to acquire design requirements and used them to expertly model designs utilizing 3D modeling software. Partnered with Manufacturing (with the Computer Numerical Control and CAM computer) to construct physical models from virtual models. Employed 3D Object Based CAD Cam software and SolidWorks for developing virtual objects and assembly prototypes for the construction and marine industries.

Provided the Computer Numerical Control Machining Department with virtual modeling prototypes for the manufacture of physical accessory parts for the marine industry. Completed physical object dimensioning for prototyping; coordinated between the Prototyping Design Department and Manufacturing CAD/CAM. Demonstrated proficiencies with precision measurement tools such as calipers, micrometers, metal squares, transporters, and other precision instruments.

Illustrated dimensioning to elaborate engineering drawings with diverse wall thicknesses, tolerances, radius, angles, and additional data needed for fabrication. Developed 2D/3D drawings with section details, renderings, assembly, and exploited drawings. Conducted mathematical calculations to estimate perimeter, area, and weight depending on the density of material, and weight per unit or linear foot.

Selected Contributions:

* Successfully designed prototypes assigned for boat and construction industry following functionally design purposes related for immediate needed manufacturing modifications for product and quality control department.

**Crawford & Tracey Corporation Glass**, Deerfield, FL USA. Hours Per Week: 40-45.

##### **CAD Operator** (06/2007 – 02/2008)

Synchronized Engineers and PMs on project specifications and product features to better create accurate representations of engineering drawings. Read/clarified construction documents for the elaboration of shop drawings; reflected components, dimensions, and surrounding conditions, as needed, including floor plans, windows, elevations, and system details based on construction conditions and systems.

Selected Contributions:

* Consistently elaborated construction documents and shop drawings for more 10 projects for private sector and governmental agencies

**Harmon, Inc.**, Boynton Beach, FL USA. Supervisor: Daren Beagle, (952) 954-5700. Hours Per Week: 40-50.

##### **CAD Technician and Designer** (12/2005 – 07/2007)

Charged with designing curtain wall systems, and storefront/punched windows using Hurricane Impact Resistant Systems HI-5000, HI-7000 and SMU. In conjunction with Engineers and PMs authored project specifications and product features to validate the creation of accurate representations of engineering drawings. Read/interpreted construction documents for the expansion of shop drawings; illustrated components, dimensions, surrounding conditions, floor plans, elevations, wall sections, assembly system details, and assembly unit drawings.

Built multiple system views that showed relationships between components and parts. Identified dimensions, angles, curvatures, and tolerances. Resolved discrepancies between the Engineering Department and Shop Fabrication by scrutinizing differences and attaining agreement. Responsible for maintaining project files, drawings, construction documents, and databases.

Selected Contributions:

* Successfully elaborated detailed construction documents and shop drawings for more than 15 projects around the country with hurricane impact system for challenging weather environments and specific style architectural design purposes

Additional Experience:

**Construction Engineer Intern *~*** S. Florida Water Management District, West Palm Beach, FL USA

# EDUCATION

### Coursework, Mechanical - Aerospace Engineering, Current, Enrolled

Montgomery College, MD

* 61-63 semester hours

### Coursework, Computer-Aided Design and Drafting

BYU Idaho, Brigham Young University Worldwide, Current, Not Enrolled

* 9 semester hours

### A&P Aviation Maintenance, Not current, Not enrolled

Embry Riddle Aeronautical University Worldwide College, FL

* 59 semester hours
* 3.667 GPA

### Associate of Science, Architecture, 2009

Miami Dade College, Miami, Florida

* 60 semester hours
* 3.06 GPA

### Associate of Science, Construction Technology, 2007

Miami Dade College, Miami, Florida

* 60 semester hours
* 3.08 GPA

# JOB-RELATED TRAINING

* Basic Training, Fort Knox, KY
* Advanced Individual Training – Helicopter Mechanic Repair, Fort Eustis, VA
* Non-Commissioned Officer Leaders Course, Fort Drum, NY

# REFERENCES

### Matthew Braman, Colonel US ARMY Commanding

DEPARTMENT OF THE ARMY**,** ***(912) 604-5507, matthew.w.braman.mil@mail.mil***

### Type Professional

### Hoffman, Jeffrey J, SFC

US ARMY, 315-921-0869***,*** [***jeffrey.j.hoffman.mil@mail.mil***](mailto:jeffrey.j.hoffman.mil@mail.mil)

### Type Professional

***Patrick Lindsey*,** *Senior Aerospace Recruiter*

PGS Worldwide, LLC***,*** 816-872-8260, ***Patrick@pgsworldwide.com***

### Type Professional

# ADDITIONAL LANGUAGES

### Spanish

# PROFESSIONAL & COMMUNITY ASSOCIATIONS

### (ASME) American Society of Mechanical Engineers

# ADDITIONAL INFORMATION

### Certification:

* Computer Aided Drafting and Design (CADD)
* REVIT 2019 Level I Architecture - CADD Microsystems
* Basic Carpentry Repair - Montgomery College
* Basic Drywall Patch, Painting and Wallpapering Repair – Montgomery College

### Honors and Awards:

* Purple Heart
* Army Commendation Medal
* Army Achievement Medal
* Good Conduct Medal
* Army Aviation Logistics Badge
* Combat Action Badge
* National Defense Service Medal
* Afghanistan Campaign Medal
* Campaign Star
* Global War on Terrorism Service Medal
* Army Service Ribbon
* Overseas Service Ribbon
* North Atlantic Treaty Organization (NATO) Medal

*“I certify that, to the best of my knowledge and belief, all of my statements are true, correct, complete, and made in good faith.”* [*04/17/2020*]