

# Takeoff/Landing Data (TOLD) App

GRAND CHALLENGE 2019 - VENDOR OPPORTUNITY PACKAGE (VOP)

Innovative GEOINT Application Provider Program (IGAPP)



## WHAT IS IGAPP?

IGAPP is a brokerage program, bridging the gap between federal customers and commercial app vendors interested in using the National Geospatial-Intelligence Agency (NGA) database of geospatial information to solve problems supporting vital and fascinating missions.

App vendors are compensated through IGAPP using a market-driven compensation model. Developers provide their IGAPP apps and innovative app ideas to turn government customer needs, problems, and challenges into safe, tested apps for the GEOINT App Store. In return, IGAPP app developers will have access to NGA's data, expertise and customers.

## BACKGROUND

Takeoff and landing gross weight limitations are vital to mission planning, so knowing the limitations and planning for contingencies is a requirement to any flight crew, to include general aviation, commercial and DoD pilots. A mobile application that provides accurate Takeoff and Landing Data (TOLD) planning capability saves time, enhances situational awareness, and improves the operational efficiency of any aircraft fleet. A mobile TOLD app removes the need for complex, time-consuming hand calculations, assists with Crew Resource Management (CRM), and provides the ability to quickly evaluate a scenario, complete a TOLD Card in seconds, and focus on their mission.

## APP NEED

The DoD is seeking a mobile app that automates TOLD planning procedures and aircraft performance data derived from operator's technical publications. The mobile app will compute all takeoff and landing gross weight limits and brake cooling times for landing to aid risk assessment for F-18E/F/G flight crews, with the added ability to customize the mobile TOLD app in order to incorporate unique operator procedures, limitations, and TOLD Card formats. The finalized application will go through the IGAPP process and be made available for customers of the GEOINT App Store.

## MARKET

This app will appeal broadly to pilots of all services, including the Army, Navy, Marines, Coast Guard and Air Force. The potential number of users is expected to exceed 1,000 and could range up to the estimated 40,000+ DoD pilots if implemented at the enterprise level.



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## REQUESTED CAPABILITIES

Automate and enhance TOLD planning to save time and reduce crew workload

Enable maximum payload capability by pinpointing weight limitations

Improve flight safety with repeatable, standardized TOLD results

Support training of TOLD planning to pilots, flight engineers, and planner

Quickly evaluate multiple airfields, diversions, and "what-if" scenarios

Optimize takeoff power settings to extend engine life (F-18E/F/G)

Present results in tailored TOLD Card format

Save and recall input scenarios or export results for e-mail, print, etc.

Customize to incorporate unique operator publications, procedures, and limitations

Highlight and warn of limiting gross weights  
Embedded app user manual

Includes fixes for mitigations in technical publication supplements

Computes all limiting gross weights for takeoff and landing, including gradient and obstacle clearance, for improved risk assessment

TOLD Card view mirrors CNI display onboard F-18E/F/G with export to PDF format

## ABOUT NGA

NGA provides timely, relevant, and accurate geospatial intelligence (GEOINT) in support of national security. NGA's strategy takes into account NGA's need to be agile in supporting multiple mission areas, including support to military and intelligence operations, intelligence analysis, homeland defense, and humanitarian and disaster relief, and to retain its focus on intelligence and defense priorities, including counterterrorism, counterproliferation, cyber, anti-access/area denial, and global coverage.



## TECHNICAL SPECIFICATIONS

Platforms – iOS phones, iOS tablets, Android phones, Android tablets

Online – Interact with web services and online sources of data

Demonstrate the ability to work in a disconnected work environment

## SUCCESS FACTORS

A successful app will meet the IGAPP Test and Evaluation criteria of function and usability:

Response time less than 3 seconds

Pass the app code security check

As part of the program, IGAPP will collect metrics on app downloads as well as web and mobile app usage. Successful app developers will also respond to user feedback from the GEOINT App Store.

## HOW TO PARTICIPATE

Register as a vendor at [igapp.com](http://igapp.com), or contact us at: [igapp\\_help@engility.com](mailto:igapp_help@engility.com)

## FREQUENTLY ASKED QUESTIONS

How do I begin contributing and gain access to the data?

Complete an IGAPP application using the link at [igapp.com](http://igapp.com). Once approved, developers will receive access to relevant data as well as an App Offering form.

How am I compensated for apps that are adopted and used?

On a per download basis at a negotiated rate. Other payment models may be available upon request.

Are apps restricted in the data they can gather from the mobile device?

Apps may not use or store any personally identifiable information (PII) about the app user.

Where are apps available for NGA customers to download?

All apps are hosted on NGA's GEOINT App Store via: <https://apps.nga.mil>

visit **IGAPP.com** for more information