Abakan Air Cargo Drop System

Presentation made for WFP

Introduction

The PSGG system consists of 4 platforms with the maximum capacity of 36 tons of cargo (9 tons each platform). PSGG allows to use different types of cargo – bulky, liquids, boxes.

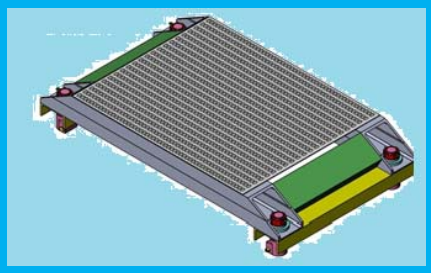
Loading of the system approximately lasts for 35 minutes and can be operated by 3 load masters.

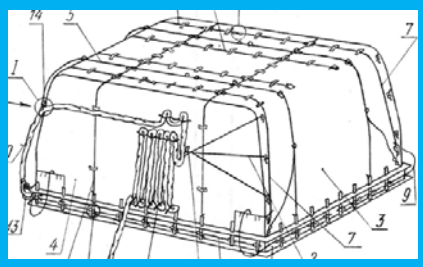
Technical-tactical characteristics

- **1. The maximum capacity: 36 tons (4 platforms per 9 tons)**
- **2. The altitude of drops from which the operations can be executed differ from 150m up to 7000m.**
- **3. Drop operations can be executed both with or without the parachutes.**
- **4. Loading time for the whole system is 35 minutes.**
- **5. Total of 4 plane runs are to be made. One platform drop per one run.**
- **6. Drop zone dimension is 500 on 200 meters.**

System Components

- **The PSGG system consists of 2 different parts – platform and sheath.**
- **Platform is produced of reinforced aviation aluminum. Each platform can hold 9 square meters of cargo.**
- **This sheath prevents the cargo from stalling and increases safety of load masters.**





Loading of the system

- **System loading can be produced in two ways:**
- **1. Traditional loading: – Empty pallets with the full amount of cargo are loaded into the aircraft.**
- **2. Using 2 sets of PSGG for each aircraft (8 platforms). One set of system is loading on the ground while aircraft is operating. After the aircraft arrival the other one is put into the plane.**

Safety

One of the main advantages of the system is the sufficient level of safety for load masters, cargo and crew that meets all aviation criteria.

Manufacturing process

Serial production of PSGG systems is established at a factory certified for the production of landing equipment and meets ISO 9001: 2015 quality standards. Particular attention is paid to the process of assembly and quality control of products.

Accuracy and dispersion

- The high accuracy and small dispersion of the landing of the cargo provides safety for people around of the landing area
- The design features of the system simplify the dropping of the cargo for pilots as well as for loading masters keeping the quality at a high level

System registration and certification

- **All the documents needed for the system approval and validation in Russia have been received by "Abakan Air".**
- **The system is approved by the Design Bureau and State Research Institute of Civil Aviation and indorsed by Russian Federal Air Transport Agency.**
- **All load masters are trained in accordance within developed program.**