# Turboprop Fleet Report 1st Quarter 2015

SINGLE AND TWIN ENGINE TURBOPROP AIRCRAFT

### No Trouble With Tribbles

By Dale Barnard and Tom Surgalski Gallagher Aviation (formerly NationAir)

We won't re-enact the infamous 44th episode of Star Trek, where the crew of the Enterprise is overwhelmed with furry Tribbles. We will, however, consider the contrast between them and the transport workhorse, the omnipresent turboprop aircraft. As the world's population grows, so does its need for goods, services, and expedient transport. The statistics for 1st quarter 2015 show a continued increase in the use of turboprops in virtually all regions of the world. They play a vital role in austere environments such as developing countries that lack infrastructure. In first-world countries, turboprops are displacing aging light jets due to superior operating costs and jet-like performance. Unlike the Tribbles, the continued production and everbroadening turboprop mission capability is a good thing.

Once again, we are tracking the top 12 turboprop aircraft, both twin and single engine, throughout the world. While longevity and stability are key fleet stats, the true game changers are the technological and performance enhancements that enable TPs to fulfill missions previously relegated to light — medium jets. Enhanced capability, coupled with an improving safety record trend, is giving current and prospective operators renewed confidence to invest in fully supported legacy and in-production single- and multi-engine turboprops.

#### **Twin Engine Turbprops**

The U.S./international split remains unchanged over the last 12 months with 54% of twin turboprops maintaining U.S. registry and 46% maintaining international registry.

| AIRCRAFT                 | PRODUCED | ACTIVE | U.S.<br>REGISTRY | INTL. REG | ACCIDENTS | FATALS |
|--------------------------|----------|--------|------------------|-----------|-----------|--------|
| TWIN TURBOPROPS          |          |        |                  |           |           |        |
| Avanti Piaggio *         | 234      | 227    | 113              | 114       |           |        |
| Cheyenne                 | 1021     | 755    | 371              | 384       |           |        |
| Conquest                 | 598      | 512    | 343              | 169       | 1         | 1      |
| King Air 90 series       | 2709     | 2204   | 1199             | 1005      |           |        |
| K/A 100/200/250/300/350  | 4139     | 3796   | 2058             | 1738      | 1         |        |
| Merlin/Metro             | 410      | 235    | 127              | 108       |           |        |
| MU-2                     | 714      | 330    | 237              | 93        |           |        |
| Twin Commander           | 902      | 708    | 277              | 431       |           |        |
| SINGLE ENGINE TURBOPROPS |          |        |                  |           |           |        |
| Caravan **               | 2309     | 2176   | 623              | 1553      | 3         |        |
| Meridian                 | 591      | 570    | 438              | 132       | 1         | 1      |
| Pilatus PC-12            | 1325     | 1303   | 871              | 432       |           |        |
| Socata TBM series        | 750      | 714    | 548              | 166       |           |        |

<sup>\*\*</sup> From 3/15 forward will reflect Caravans that are commercial cargo aircraft, not previously reported.

#### More Than Just Insurance.

In a complex world, insurance is just the start of risk management and asset protection. We provide essential support, either at no additional cost or at preferred rates with priority access.

#### Claims and Safety Advisor

In-house claims advisor and accredited IS-BAO auditor

#### **Contract Review**

Complimentary contract review services for purchase, service, maintenance, FBO, and lease agreements, among others

## SMS/IS-BAO and ERP/Family Assistance

Access to industry experts at preferred rates

#### Legal Counsel

Preferred rates for litigation and asset protection representation

**Piaggio Avanti**—**EVO:** With stagnant fleet statistics for the first 12 months, it is difficult to determine much less comment on the Avanti's status. In contrast, the EVO has received EASA certification, clearing the way for production. Fewer than 250 airframes exist worldwide.

**Cheyenne** lost only one airframe in the last 12 months. Cheyennes continue to be supported by service centers with adequate parts availability, ensuring this airframe will be in service for the foreseeable future.

**Conquest** lost 4 airframes in the last 12 months. Despite having fewer than 350 airframes in the U.S. they continue to be a sought-after journeyman.

**King Air**—For the 90 series, international deliveries and registry transfers dominated the last 12 months. The 90 series remains in production with 18 airframes delivered in the last 12 months. In the King Air 100—350 series, 282 airframes were produced in the last 12 months. US domestic deliveries dominated at a 2 to 1 ratio. The King Air 90 and 200 series continue to dominate the twin turboprop air ambulance market.

MU2 and Merlin—Merlins lost 5 airframes in the last 12 months; they enjoy a smaller yet loyal following. Lower price points have made the Metro a viable entry-level twin TP for commercial operators. MU-2s lost 7 airframes in the last 12 months, bringing them to a scant 237 in the U.S. and 93 abroad. If it weren't for fanatical fans and Mitsubishi's support, this airframe would have become a statistical footnote long ago.

Twin Commander — The worldwide fleet lost 8 airframes in the last 12 months and the U.S. actives dropped to 39% of the overall fleet population. Normally, this would be the harbinger of a distressed fleet. However, quite the opposite is true. The OEM, service centers and loyal owner operators have outpaced many similar legacy twin TPs in STCs and upgrades, plus interior completions that rival eight-figure intercontinental jets. A fully engaged owner/operator base, supported by legacy service centers that cater to both the U.S. and international customer base, keep this airframe vibrant for the foreseeable future.

#### **Single Engine Turboprops**

Just like the twin TPs, the U.S./international split remains unchanged, holding steady at 52% U.S. registry and 48% international.

Caravan represents 41% of overall single-engine turboprop production. International deliveries dominated by a 3 to 1 margin. This iconic TP celebrated 30 years of continuous production this quarter. What's more, 2015 debuts an upgraded fourth model, the Grand Caravan EX with an 867hp PT6A engine that provides superior performance. Cessna projects will surpass 2,500 total airframes produced by year end.

Meridian — Not to be outdone by the Caravan, Piper has rebranded the M series, introducing the piston M350, the M500 & M600 SE TPS with enhanced performance and avionics packages. With less than 600 airframes produced to date, Piper is banking on the rebranding of their enhanced M series to breathe new life into Piper with increased sales. Domestic deliveries outpaced international deliveries at a ratio of 3 to 2.

**Pilatus**—The in-demand PC12/NG favored U.S. customers at a rate of 9 to 1 for the last 12 months. Beyond pleasure, business and utility, the platform has become the single-engine TP of choice for air ambulance operators. Pilatus remains one of the only turboprops to offer an internal hoist suitable for most bariatric patients.

**TBM**—After successfully rebounding after a string of unfortunate accidents in 2014, TBM produced 71 airframes over the past 12 months, with U.S. deliveries dominating at a 3 to 1 ratio.

Both twin and single turboprops remain in demand worldwide. In the last 12 months we've seen two legacy airframes (Cheyenne and Twin Commander) and one inproduction OEM (Caravan) continue to migrate from the U.S. to international registry. However, their exodus is easily offset by overwhelming U.S. demand for Meridian, Pilatus, TBM and the King Air twins. Factor in lower-than-forecast losses in the 1st Quarter 2015, and you have a welcome population of turboprops, not a troubling troupe of Tribbles.

**Dale Barnard** is Gallagher Aviation's air medical team leader and also manages the Twin Commander Insurance Program. He is a member of the Association of Air Medical Services and the Air Law Enforcement Association.

dale\_barnard@ajg.com. | 360.635.8008