



ODA Metric Continuous Improvement Team Summary Report for 2017

Executive Summary

One of the foundational elements of the Aircraft Certification Service's transformation is strengthening AIR-industry relationships. The Organization Designation Authorization (ODA) Scorecard is both a tool and a process to help the FAA and industry institutionalize how we work together and improve our relationships at the local and national levels. The scorecard provides data that is the foundation for productive dialogues leading to action plans, where needed. Use of the ODA Scorecard process and metric data has enabled the FAA and industry to work more collaboratively.

In 2017, all 39 TC and STC ODA holders participated, resulting in 45 scorecards. A review of the results in this report will show that the ODAs are working well overall and the ODA Scorecard is driving relationships and conversations to move industry and FAA forward on delegation and safety. Based on the data, we have also identified improvements we can make as we move forward to make ODAs even more effective for both the industry and the FAA.

Summary of scorecard results

The goal is for our measures of success to show a year-to-year improvement. All 12 of our measures of success trended in the positive or neutral direction in 2017. Our overall measure of success of company and FAA performance was positive with 40 out of 45 (89%) scorecard rating pairs achieving a green/green rating (meeting expectations). This is a 17% increase over 2016, and a 26% improvement over 2 years.

Working together, the FAA and industry completed 75 out of 85 (88%) of the 2015 National Initiative action plans, which is a 44% improvement from 2016. The results and trends indicate that we are successfully partnering, and that we are agreeing on and completing actions to improve how we work together.

Currently, 89% of companies now have procedures to work some projects without initial review by the FAA, resulting in only 59% of ODA projects nationwide requiring a Project Notification Letter (PNL) to the FAA. We also increased delegation in the areas of Instructions for Continued Airworthiness (ICA) and Electrical Wiring Interconnect System (EWIS). In 2017, the number of ODAs that were granted the authority to approve ICAs was increased to 90%. The scorecard continues to be an active and vital avenue for the FAA and industry to work together on shared initiatives, and to correct and improve processes and relationships.

The percentage of total non-compliances found by companies increased by 18% in 2017 (this is a health measure of the companies' self-audit processes). The scorecard data



indicates that the FAA and industry are overall working effectively at the local level to identify and resolve issues as evidenced by the number of local action plans, and the percent that are complete. The FAA and companies have completed 53 of the 69 (77%) local action plans initiated in 2015 and 2016.

Opportunities for improvement

Scorecard data also reveals that while we have made excellent progress there is still room for improvement. This year, the percentage of local action plans completed decreased to 77%. However, the CIT does not see this as indicative of a downward trend. The local FAA and ODA holder teams are tackling more difficult issues that take longer to resolve. We believe that the continued use of local action plans, and the willingness to take on some difficult issues, is indicative of a healthy system. The CIT agreed that use of the percent of local action plans completed as a health measure should be combined with a CIT group qualitative assessment of local action plan progress.

CIT analysis of scorecard data and defined measures of success included an evaluation of scorecard changes made for the 2017 cycle. New metrics were created for the 2017 cycle to better capture the granularity in FAA participation in issue papers, flight testing, and test witnessing to understand how this affects project completion and delegation. However, it was not implemented consistently and many did not use these new metrics and others were not able to capture the data from projects in progress. The CIT agreed that in the future, new improvements will be prototyped prior to full roll out and change management principles should be employed to effectively implement scorecard updates.

The metrics have shown increasing numbers of Green/Green evaluations coming out of the ODA's and Organization Management Teams (OMT's). This is extremely positive, and is a testament to the hard work being put in by all the organizations. The CIT is concerned that this qualitative metric is more indicative of the great working together relationship as opposed to an indication of actual performance. Therefore, some adjustment may be required to continue to gather positive working together data, while also capturing the latter qualitative performance data. We have mitigated this concern with more definition and questions to answer, which will be included in the 2018 cycle for determining overall performance qualitative ratings. The CIT agreed on a list of considerations that can be used by companies and the FAA in determining the overall qualitative performance ratings.

Background

The FAA Modernization and Reform Act (FMRA) of 2012 required the FAA to work with industry stakeholders to streamline and improve the certification process. Section 312 of the FMRA was aimed at reducing certification delays through a collaborative effort with industry stakeholders while maintaining or improving the existing level of safety.



Both Industry and FAA agree that delegation continues to be a very powerful tool to leverage industry expertise, and reduce certification cycle time with no negative impact to safety. Organizational delegation is reliant on industry processes and a healthy compliance culture, coupled with an oversight approach that is properly executed by the FAA. Over the past 10-15 years, there have been significant improvements in certification processes. Specifically, with the creation of ODA in 2005, FAA and Industry began to make the necessary investments in moving toward a systems approach to certification and greater reliance on applicants' capabilities and processes. Although more work needs to be done by both FAA and industry applicants in implementation and oversight to achieve the full potential of ODA, its creation has been a significant step forward.

In 2015, the FAA collaborated with industry to develop a set of metrics aimed at measuring the overall performance and health of the ODA system in type certification projects. The objectives were to define mutually agreed metrics, identify areas that were in need of greater focus and to identify issues and concerns with respect to FAA and ODA holders' performance. The FAA initiated an ODA Scorecard pilot project to resolve implementation issues, and obtain data to support implementation of the metrics nationwide. AIA (Aerospace Industries Association) and GAMA (General Aviation Manufacturers Association) supported this activity, assisted in securing greater involvement by ODA holders and participated in regional meetings around the country. Twenty-four companies participated in the pilot project which concluded in December of 2015.

In January 2016, in a joint AIA, GAMA, and FAA meeting, the results of the pilot project were reviewed and discussed. The results indicated that the initiative was a resounding success, with over 80% of participants (both FAA and companies) indicating they experienced value in the pilot, and recognized the greater potential that the scorecard could present to all stakeholders. The FAA, with full support of industry, decided to proceed with implementation of the metrics nationwide for all ODAs with type certificate and supplemental type certificate approval authorization.

One of the key elements foundational to the success of this effort was the true partnership between industry and the FAA in defining the metrics and working together during the implementation. The stakeholders were given an opportunity to be part of the plan, and did not shy away from increased accountability. Going forward, it is important to keep an open, constructive dialogue to be successful in this joint effort. To achieve this objective, the FAA and industry (AIA and GAMA) agreed to establish an ODA Metrics Continued Improvement Team (CIT). The mission of this team is to advance systems performance through reliable and accurate indicators, such that, all stakeholders agree on ODA performance and make contributions to



improvement plans designed to enhance ODA effectiveness. The CIT is a tool for ensuring continuing progress toward the effective and efficient certification processes that are needed to maintain U.S. leadership in aviation.

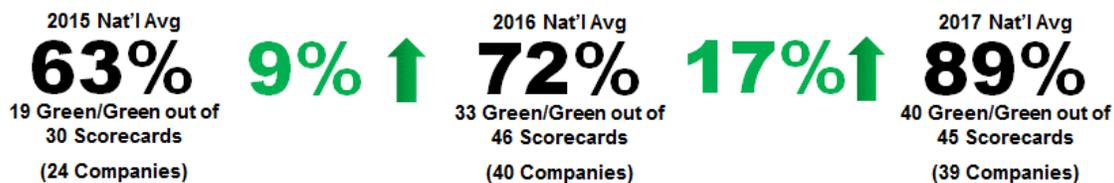
The scorecard provides the opportunity to identify and address, via national and local action plans, areas for improvement that are essential to the success of both parties. The scorecard allows the FAA and the ODA holder to assess each other's performance and satisfaction with the ODA program and associated certification activity. The scorecard also provides data that can differentiate local from national issues, so the appropriate group can address them. Currently, the scorecard is largely focused on the engineering design approval aspects of Type Certification (TC) and Supplemental Type Certification (STC) ODA holders.

2017 ODA Scorecard Measures of Success

For 2017, the following 12 measures of success were identified by the CIT as indicators of overall ODA program health (this data captures CY2017 scorecard results and action plan progress through 1/11/2018):

- 1) Qualitative Company/FAA Performance: The goal is for overall ratings to show a year-to-year improvement in the percentage of green/green Company/FAA pairings. In 2015, 63% of the scorecards indicated a green/green Company/FAA pairing (19 out of 30 scorecards). In 2016, 72% of the scorecards indicated a green/green Company/FAA pairing (33 out of 46 scorecards). The year-to-year improvement from 2015 to 2016 was reflected in the 9% increase. In 2017, 89% of the scorecards indicated a green/green Company/FAA pairing (40 out of 45 scorecards). The year-to-year improvement from 2016 to 2017 was reflected in the 17% increase.

Measure 1 - Qualitative Company/FAA Performance



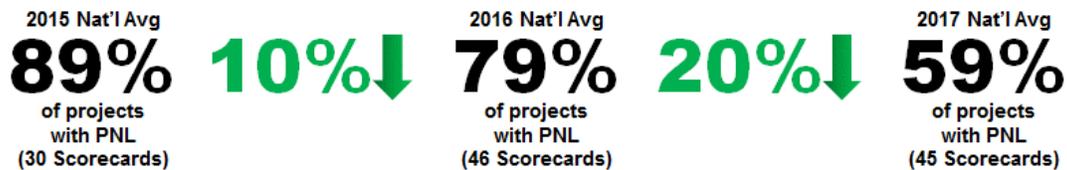
- 2) No-Project Notification Letter (PNL) Action Plan Status: No-PNL Authority is a 2015 ODA Scorecard Initiative targeting 36 companies for which the FAA and Industry agreed the authority applies. The goal is to show a year-to-year increase in the number of ODAs with No-PNL Authority. Prior to the 2015 ODA Scorecard Prototype, 14% of the 36 companies held No-PNL Authority. By January of 2017, 67% of the 36 companies had received No-PNL Authority. The year-to-year improvement was reflected in the 53% increase. By January of 2018, 89% of the 36 companies had received No-PNL Authority. The year-to-year improvement was reflected in the 22% increase.

Measure 2 - No-PNL Action Plan Status



- 3) FAA Involvement – PNL Projects: The goal is to show a year-to-year decrease in the percentage of projects with PNL. In 2015, there were 89% of projects with PNL. In 2016, there were 79% of projects with PNL. The year-to-year improvement from 2015 to 2016 was reflected in the 10% decrease. In 2017, there were 59% of projects with PNL. The year-to-year improvement from 2016 to 2017 was reflected in the 20% decrease.

Measure 3 - FAA Involvement – PNL Projects



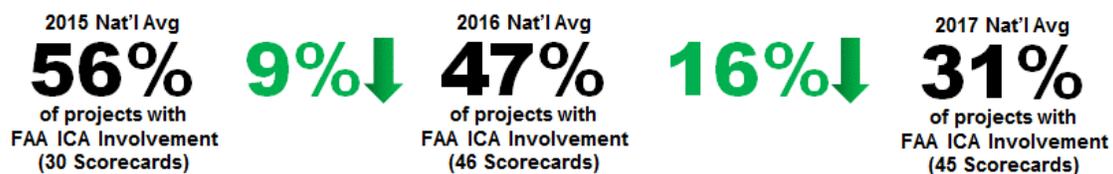
- 4) Instructions for Continued Airworthiness (ICA) Delegation Action Plan Status: ICA Delegation is a 2015 ODA Scorecard Initiative targeting all companies, where the goal is to show a year-to-year increase in the number of ODAs with ICA Delegation. Prior to the 2015 ODA Scorecard Prototype, 18% of all companies (40) held ICA Delegation. By January of 2017, 50% of all companies (40) had received ICA Delegation. The year-to-year improvement was reflected in the 32% increase. By January of 2018, 90% of all companies (39) had received ICA Delegation. The year-to-year improvement was reflected in the 40% increase.

Measure 4 - ICA Delegation Action Plan Status



- 5) FAA Involvement – ICA: The goal is to show a year-to-year decrease in the percentage of projects with FAA involvement when ICA is listed as a reason. In 2015, there were 56% of projects with FAA ICA involvement. In 2016, there were 47% of projects with FAA ICA involvement. The year-to-year improvement from 2015 to 2016 was reflected in the 9% decrease. In 2017, there were 31% of projects with FAA ICA involvement. The year-to-year improvement from 2016 to 2017 was reflected in the 16% decrease.

Measure 5 - FAA Involvement – ICA



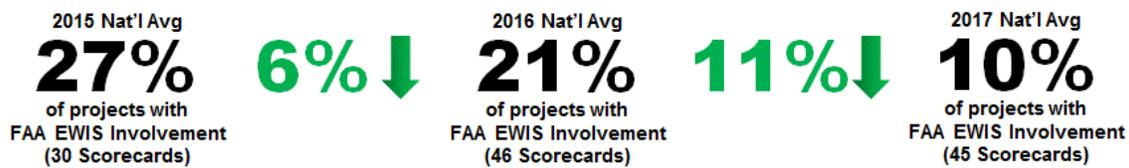
- 6) FAA Involvement – Electrical Wiring Interconnection Systems (EWIS) Delegation Action Plan Status: EWIS Delegation is a 2015 ODA Scorecard Initiative targeting 29 companies, initially, where the goal is to show a year-to-year increase in the number of ODAs with EWIS Delegation. Prior to the 2015 ODA Scorecard Prototype, none of the 29 companies held EWIS Delegation. By January of 2017, 14% of the 29 companies had received EWIS Delegation. The year-to-year improvement was reflected in the 14% increase. By January of 2018, 80% of the targeted companies had received EWIS Delegation. The year-to-year improvement was reflected in the 66% increase. Note that at the start of the 2017 cycle, the CIT agreed to reduce the number of companies targeted for EWIS delegation, from 29 companies to 10 companies, based on past involvement data.

Measure 6 - FAA Involvement – EWIS Delegation Action Plan Status



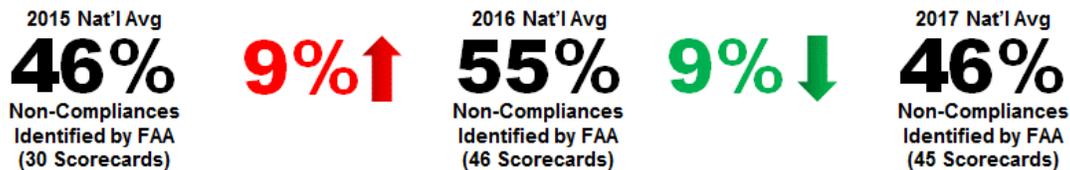
- 7) FAA Involvement – EWIS: The goal is to show a year-to-year decrease in the percentage of projects with FAA involvement when EWIS is listed as a reason. In 2015, there were 27% of projects with FAA EWIS involvement. In 2016, there were 21% of projects with FAA EWIS involvement. The year-to-year improvement from 2015 to 2016 was reflected in the 6% decrease. In 2017, there were 10% of projects with FAA EWIS involvement. The year-to-year improvement from 2016 to 2017 was reflected in the 11% decrease.

Measure 7 - FAA Involvement – EWIS



- 8) Identified Non-Compliances: The goal is to show a year-to-year decrease in the percentage of Non-Compliances found by FAA in comparison to identified by the company. In 2015, 46% of Non-Compliances were identified by the FAA. In 2016, 55% of Non-Compliances were identified by the FAA. The year-to-year regression from 2015 to 2016 was reflected in the 9% increase. However, in 2017, 46% of Non-Compliances were identified by the FAA. The year-to-year improvement from 2016 to 2017 was reflected in the 9% decrease.

Measure 8 - Identified Non-Compliances



9) Airworthiness Non-Compliances: The goal is to show a year-to-year decrease in the rate of airworthiness non-compliances per company. In the 2016 CIT Report, this metric was calculated using simply the total number of non-compliances. In 2015, 238 total airworthiness non-compliances were found across 24 companies. In 2016, 190 total airworthiness non-compliances were found across 40 companies. The year-to-year improvement from 2015 to 2016 was reflected in the 20% decrease. In this year's CIT report, this metric was calculated differently to reflect the rate of non-compliances per company. In 2015, the rate of non-compliances per company was 10. In 2016, the rate of non-compliances per company was 5. The year-to-year improvement from 2015 to 2016 was reflected in the 50% decrease. In 2017, the rate of non-compliances per company was 5, the same as in 2016.

Measure 9 - Airworthiness Non-Compliances

From last year's CIT report:

<small>2015 Total</small> 238 <small>(24 Companies)</small>	<small>2016 Total</small> 190 <small>(40 Companies)</small>	48 (20%) ↓
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For this year's CIT report:

<small>2015</small> $\frac{238 \text{ NC}}{24 \text{ Companies}} = 10 \text{ NC/Cmpy}$	<small>2016</small> $\frac{190 \text{ NC}}{40 \text{ Companies}} = 5 \text{ NC/Cmpy}$	<small>2017</small> $\frac{184 \text{ NC}}{39 \text{ Companies}} = 5 \text{ NC/Cmpy}$
10 $\frac{\text{NC}}{\text{Cmpy}}$	50% ↓	5 $\frac{\text{NC}}{\text{Cmpy}}$
	0%	5 $\frac{\text{NC}}{\text{Cmpy}}$

10) Corrective Action Timeliness: The goal is to show a year-to-year improvement in company corrective action timeliness. In 2015, no data was collected for this measure, and in 2016, this data was collected in a different format (total time open for 2016 vs. percent on-time for 2017). In 2017, the national average for corrective actions completed on-time was 82% (18% of corrective actions were late). For the 18% of corrective actions that were late, the additional time needed to complete the corrective actions was 66% of the originally scheduled completion time.

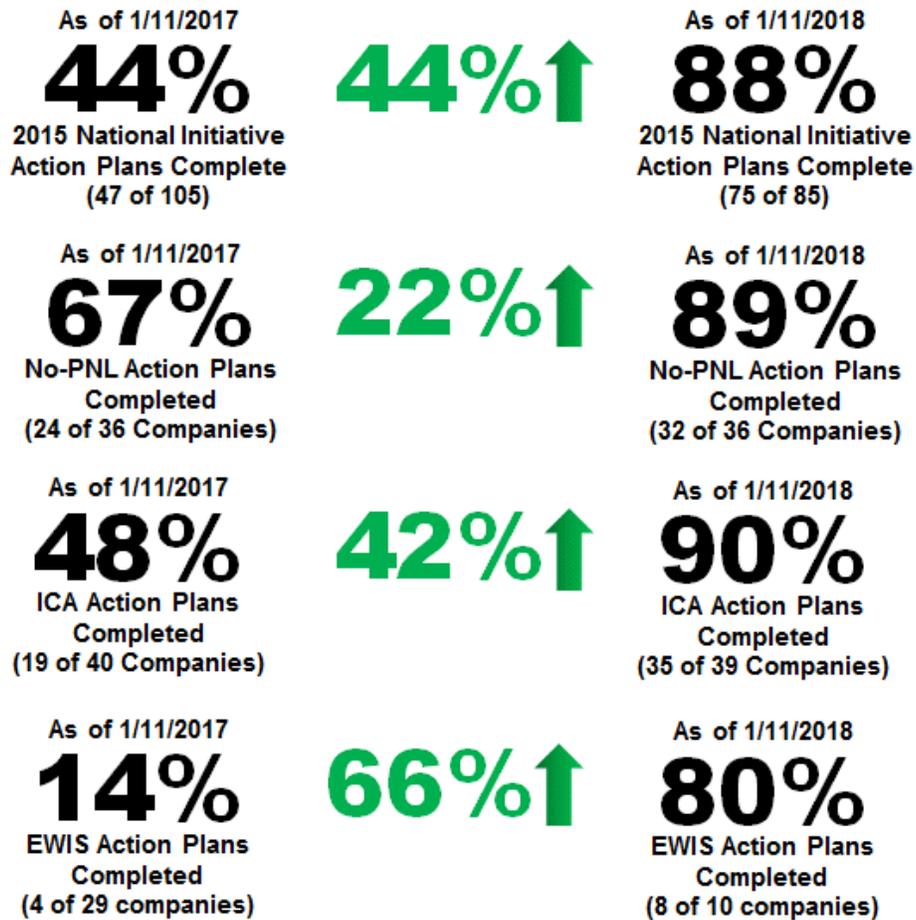
Measure 10 - Corrective Action Timeliness

2017 Nat'l Avg
82% of CA completed on-time
(18% late)

For the 18% that were late, the additional time needed to complete the CA was on average
2017 Nat'l Avg
+66% of the originally scheduled completion time

11) National Initiative Action Plans (No-PNL, ICA, EWIS): The goal is to maximize the percent of National Initiative Action Plans completed each year. As of January 2017, 44% of National Initiative Actions Plans were complete (47 out of 105). One year later in January 2018, 88% of National Initiative Action Plans were complete (75 out of 85). The year-to-year improvement from 2017 to 2018 was reflected in the 44% increase. Below are the specific breakdowns of the completion of each National Initiative Action Plan (No-PNL, ICA, EWIS).

Measure 11 - National Initiative Action Plans (No-PNL, ICA, EWIS)



12) Local Action Plans: The goal is to maximize the percent of Local Action Plans completed each year. In 2015, 97% of Local Action Plans were completed (29 out of 30). In 2015 and 2016 combined, 77% of Local Action Plans were completed (53 out of 69). The CIT determined that a 77% completion value, when compared to a 97% completion value from the previous year, was satisfactory and should not be recorded as a negative trend. Instead, each value was viewed as satisfactory, and the trend was decided to be “neutral”. The CIT wants to encourage each ACO/company pairing to commit to local action plans, some of which may be multi-year plans. In 2015, 30 local action plans were initiated; in 2016, 39 local action plans were initiated. The CIT viewed this trend as healthy.

Measure 12 – Local Action Plans

As of 1/11/2017
97%
2015 Local
Action Plans Complete
(29 of 30)

As of 1/11/2018
77%
2015 and 2016 Local
Action Plans Complete
(53 of 69)

Continuous Improvement Activities

1. All agreed AEG participation in the CIT would be very beneficial. Currently, a large part of the retained findings are in the AEG area. We would like to explore the ability to enable some projects to proceed without AEG involvement. This will be an ongoing CIT discussion. The CIT now has AEG participants. The CIT created two sub-teams of industry, AIR, and AEG to:
 - a) Develop and drive improvements in ICA delegation. (Industry has expressed concern with either losing or having to change the processes for the newly obtained ICA delegation based on the current rev C proposed changes to FAA Order 8100.15.)
 - b) Evaluate if and how the operational suitability reviews of Flight Manual Supplements can be delegated.
2. There was discussion regarding the effectiveness of the bottom half of the Scorecard, ‘Measures of Company Compliance/Safety’. The CIT has deferred major changes of this section until after the release of the 8100.15. Rev C Order, which will incorporate new oversight protocols.
3. The CIT member companies and associated FAA OMTs agreed to prototype any new Scorecard measures, or significant changes to existing measures, to ensure good return on investment.

Changes to the 2018 ODA Scorecard

The CIT suggested and approved the following changes to the Scorecard, Scorecard FAA Users Guide, Process, and Training Materials:

1. The CIT will develop a method for collecting sharable areas of future improvement or best practices from FAA/company pairings. This will be prototyped by the ODA CIT member companies in 2018.
2. Percent action plans closed in the year may not be a good indicator of success. A measure should address if an action plan is proceeding on time, and if it is effective in resolving the concern. Scorecard guidance has been updated such that the local action plan(s) progress status is captured in the qualitative assessment comments (e.g., “Satisfactory progress is being made on local action plans). Changes to the Work Instruction and Briefing material have been made to make this a best practice.
3. To improve consistency across ODAs and OMTs on how they are determining the qualitative performance assessment color, an updated list of considerations has been added to the Work Instruction to help companies and the FAA in determining the rating.
4. Agreed to make the recording of Flight Test and Engineering test data collection on the Participation tab mandatory for the 2018 cycle. Briefing material will be revised to reflect this expectation.



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FAA BASOO	John Piccola
FAA Aircraft Certification ODA Policy	Scott Geddie
FAA Wichita ACO	Linda Dicken
FAA Flight Standards ODA Policy	Jay Kitchens
FAA Boston AEG	Bob Barnes
AIA	David Silver
GAMA	Walter Desrosier
GE Aviation	Paul Hill
HEICO	Marco Cuberos
The Boeing Company	Christine Thompson
Textron Aviation	Stephen Gielisch
Bell Helicopter	Tom Brooks
Garmin	Davy Armstrong
Duncan Aviation	Mike Chick



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