UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC

In the Matter of: ROYAL AVIONICS SYSTEMS, INC.
FAA Order No. 2002-6

Docket No. CP99WP0021
DMS No. FAA-1999-5976[1]

Served: April 16, 2002

DECISION AND ORDER[2]

By written order issued on April 5, 2000 (attached), Administrative Law Judge Burton S. Kolko held that Royal Avionics Systems, Inc., an FAA-approved repair station, committed three violations of 14 C.F.R. § 145.53(a)[3] by maintaining equipment for which it was not rated and assessed a $3,300 civil penalty. Royal Avionics has appealed, arguing that it did not violate Section 145.53(a). After consideration of the briefs filed by the parties on appeal and the record of this case, Royal Avionics' appeal is denied.

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[1] Materials filed in the FAA Hearing Docket (except for materials filed in security cases) are also available for viewing through the Department of Transportation's Docket Management System (DMS). Access may be obtained through the following Internet address: http://dms.dot.gov.

[2] The Administrator's civil penalty decisions, as well as indexes of the decisions, the Rules of Practice in civil penalty actions, and other information, are available on the Internet at the following address: http://www.faa.gov/agc/cpwebsite. In addition, there are two reporters of the decisions: Hawkins' Civil Penalty Cases Digest Service and Clark Boardman Callahan's Federal Aviation Decisions. Finally, the decisions are available through LEXIS and Westlaw. For additional information, *see* the website.

[3] Section 145.53(a) of the Federal Aviation Regulations provides:

> **Limitations of certificates.**
> A certificated domestic repair station may not maintain or alter any airframe, powerplant, propeller, instrument, radio, or accessory for which it is not rated, and may not maintain or alter any article for which it is rated it if requires special technical data, equipment, or facilities that are not available to it.

14 C.F.R. § 145.53(a)(1998).

I.

FAA regulations prohibit repair stations from performing maintenance for which they do not hold appropriate ratings. 14 C.F.R. § 145.53(a). Radio and instrument ratings are among the types of ratings issued by the FAA to domestic repair stations. 14 C.F.R. §§ 145.31(d) & (e).[4] A Class 3 *radio* rating for radar equipment authorizes a repair station to maintain any type of radar equipment, and a Class 3 *instrument* rating for gyroscopic instruments authorizes it to maintain any gyroscopic instrument or system.[5]

The Administrator may also issue a *limited* radio or instrument rating, if appropriate, permitting a repair station to perform maintenance on only a particular make and model of radio or instrument equipment respectively. 14 C.F.R. §§ 145.33(a) & (b). For example, if a domestic repair station intended to maintain only a particular piece of radio equipment, it could apply for a limited radio rating permitting maintenance of that specific make and model of equipment only,[6] rather than an appropriate class (unlimited) radio rating.

The Administrator also issues airframe ratings and limited airframe ratings that permit repair stations to work on airframes. 14 C.F.R. §§ 145.31(a) and 145.33(b)(1).[7]

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[4] *See* 14 C.F.R. § 145.31 for the other types and classes of ratings that the FAA issues to domestic repair stations.

[5] Section 145.31(e)(3) describes gyroscopic instruments as "any instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts, and flux gate and gyrosyn compasses." 14 C.F.R. § 145.31(e)(3).

[6] The make(s) and model(s) of the particular piece of equipment would be listed on the domestic repair station's operations specifications as part of the limited rating.

II.

While conducting routine surveillance of Royal Avionics in June 1988, FAA Inspector Mario Villarrubia[8] reviewed the company's work orders and detected certain discrepancies, leading him to believe that Royal Avionics had performed maintenance for which it was not rated. (Tr. 12, 14-23.)[9]

Replacement of 421CC's Weather Radar Receiver/Transmitter. Villarrubia reviewed a work order indicating that Royal Avionics performed maintenance on a Lifeflite Cessna 421, registration number 421CC, beginning on February 7, 1998. The work order stated that the "[r]adar has no returns." Royal Avionics indicated on the work

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[7] FAA Inspector Mario Villarrubia testified at the hearing that a repair station holding an airframe rating could remove and replace a system from an airframe but could not perform any other maintenance on that system. (Tr. 24.)

[8] Villarrubia's specialty is avionics maintenance. (Tr. 10-11.)

[9] At the time that Royal Avionics performed the repairs questioned by Villarrubia, Royal Avionics held the following ratings and limited ratings:

Ratings (issued under Section 145.31)

- Radio Rating, Class I and II

Limited Ratings (issued under Section 145.33)

- Limited Radio Rating, for all makes and models of ATC transponders
- Limited Radio Rating, for all makes and models of Distance Measuring Equipment (DME)
- Limited Instrument Rating for certain makes and models of autopilots as specified on its operations specifications.

(Complainant's Exhibits 2 and 3.)

order that it removed and replaced the weather radar receiver/transmitter (RT)[10] and then performed a successful operational check. (Complainant's Exhibit 1; Tr. 13.)

Villarrubia was concerned about this entry because Royal Avionics held neither a Class 3 radio rating, allowing it to repair radar equipment, nor a limited radio rating for this particular make and model of weather radar. (Tr. 14, 17-18.) Villarrubia testified that Royal Avionics also did not hold an airframe rating or a limited airframe rating that would have permitted it to remove and replace the weather radar receiver/transmitter from the airframe.

Refilling 421CC's Flux Valve. Villarrubia was also concerned about the entry on the same work order indicating that Royal Avionics personnel filled the flux valve with fluid. (Tr. 18.) He explained that a flux valve, also known as a flux gate, provides information to keep a gyroscope aligned with the earth's magnetic field.[11] (Tr. 18-19.) Villarrubia was concerned because Royal Avionics did not hold a Class 3 instrument rating for gyroscopic instruments or a limited instrument rating for that flux valve.

Removal and Replacement of the Horizontal Situation Indicator (HSI). During his inspection, Villarrubia reviewed another work order, regarding another Lifeflite Cessna 421, N66NC, and indicating that Royal Avionics had replaced the horizontal situation indicator[12] on April 1, 1998. (Tr. 20-21; Complainant's Exhibit 3.) The work

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[10] A weather radar receiver/transmitter is an electronic box that transmits and receives a signal identifying any weather in front of the aircraft. (Tr. 40-41.)

[11] Although the flux valve itself is not gyroscopic, Section 145.31(e)(3) specifically includes flux gates as Class 3 gyroscopic instruments. (Tr. 18-19.)

[12] The horizontal situation indicator provides magnetic heading information to the pilot. (Tr. 22, 67.) The horizontal situation indicator sends a signal to the autopilot, which interpolates the information sent to it. (Tr. 97-98.)

order indicated that Royal Avionics had removed the horizontal situation indicator, installed a new system in accordance with the manufacturer's installation manual, and tested and aligned the system to specifications. (Tr. 21; Complainant's Exhibit 3.) In Villarrubia's opinion, Royal Avionics was not qualified to do this maintenance on the horizontal situation indicator because Royal Avionics possessed neither a Class 3 instrument rating for gyroscopic instruments issued under Section 145.31(e) nor a limited instrument rating for this particular type of horizontal situation indicator. (Tr. 22-23.)

Subsequent Issuance of Airframe and Instrument Ratings to Royal Avionics. As a result of Villarrubia's concerns, Royal Avionics worked with Bruce Bessette, who replaced Villarrubia as the FAA inspector assigned to Royal Avionics, to obtain instrument and airframe ratings. According to Royal Avionics' Del Willeford, Royal Avionics personnel did not have to take any special classes or training, or buy any equipment to qualify for these additional ratings. He said that he passed the oral examination for these additional ratings given to him by Bessette. (Tr. 55-58.)

III.

The ALJ held that Royal Avionics performed maintenance for which it was not rated when it 1) removed and replaced the weather radar receiver/transmitter, 2) filled the flux valve with fluid, and 3) removed and replaced the horizontal situation indicator. As a result, he held, Royal Avionics violated Section 145.53(a). (Initial Decision at 4-6.)

Regarding the replacement of the weather radar receiver/transmitter, the ALJ held that Royal Avionics had performed maintenance for which it was required to hold either a Class 3 radar equipment rating or an appropriate limited radio rating. The ALJ rejected Royal Avionics' contention that it had not performed any maintenance, but simply

replaced a unit, because the definition of "maintenance" in 14 C.F.R. § 1.1 includes "replacement of parts." (Initial Decision at 4.) The ALJ noted further that the replacement of the weather radar receiver/transmitter required "knowledge and skills, at least on some core level" in that Royal Avionics had replaced the unit after troubleshooting the problem (radar has no returns) and had performed an "ops check" to ensure that the unit was working properly. (Initial Decision at 4.)

The ALJ concluded that Royal Avionics' actions regarding the flux valve also constituted maintenance under the regulatory definition of that term, regardless of the fact that the flux valve is a sealed unit and that Royal Avionics simply filled the flux valve through a port in the valve. The ALJ rejected Royal Avionics' argument that the flux valve can be considered as part of the autopilot, and as a result, Royal Avionics was qualified to work on it. He noted that to accept this argument would necessitate ignoring Section 145.31(e)(3)'s specific inclusion of flux gates in the category of instruments requiring a class 3 instrument rating. (Initial Decision at 5.) The ALJ stated also that to hold the flux valve to be part of the autopilot would "eviscerate proper distinctions between separable components." (Initial Decision at 5.)[13]

The ALJ rejected Royal Avionics' arguments that it had not performed maintenance on the horizontal situation indicator and that the horizontal situation indicator is part of the autopilot.[14] The ALJ concluded, Royal Avionics needed to have a

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[13] Willeford testified that Royal Avionics held the required rating to work on the flux valve because in his view, the flux valve was part of the autopilot, and it was qualified to do maintenance on autopilots under its Class 2 radio rating. He said that when Royal Avionics worked on this aircraft, the original problem was that the autopilot would not track the nav, and it determined that this was due to the low level of flux valve fluid. (Tr. 64.)

[14] Willeford testified that Royal Avionics replaced the horizontal situation indicator because there had been continual problems with it, causing the autopilot to be out of order frequently.

Class 3 instrument, a limited instrument, or an airframe rating to replace the horizontal situation indicator. (Initial Decision at 6.)

The ALJ determined that it was appropriate to impose the maximum civil penalty per violation, $1,100, for each of the three violations of Section 145.53(a), and assessed a $3,300 civil penalty against Royal Avionics. (Initial Decision at 6.)

IV.

1. Was the Complaint Stale?

Royal Avionics argues in its appeal brief that it was error for the ALJ to deny Royal Avionics' motion to dismiss the allegations in the complaint as stale. This argument is rejected.

Under Section 13.208(d) of the Rules of Practice in FAA Civil Penalty Actions, "a respondent may move to dismiss the complaint, or that part of the complaint, alleging a violation that occurred ... more than 2 years before an agency attorney issued a notice of proposed civil penalty to the respondent." 14 C.F.R. § 13.208(d). Section 13.208(d) is consistent with a provision in the FAA's authorizing statute that "Except for good cause, a civil action involving a penalty under this paragraph may not be initiated later than 2 years after the violation occurs." 49 U.S.C. § 46301(d)(7)(C).[15]

According to Willeford, Royal Avionics believed that it was authorized to remove and replace the horizontal situation indicator because it was authorized to perform maintenance on autopilots, although he acknowledged that the horizontal situation indicator is a system separate from the autopilot. He also testified that Royal Avionics thought that it was authorized to remove and replace the horizontal situation indicator because it did not repair any of the internal mechanisms of the indicator, but instead just removed the complete unit and installed another complete unit. (Tr. 66, 68-69, 78.)

[15] In its appeal brief, Royal Avionics quotes from the stale complaint rule, of the National Transportation Safety Board (NTSB), 49 C.F.R. § 821.33. Under that rule, in proceedings before the NTSB, a complaint's allegations are stale if the alleged violation(s) occurred more than 6 months prior to the date the FAA Administrator advises the respondent as to the reasons for the proposed action. 14 C.F.R. § 821.33. The NTSB's stale complaint rule does not apply to civil

Royal Avionics replaced 421CC's weather radar receiver/transmitter and filled its flux valve with fluid on February 7, 1998, and replaced N66C's horizontal situation indicator on April 1, 1998. The agency issued the notice of proposed civil penalty to Royal Avionics on April 19, 1999. The complaint was not stale under 14 C.F.R. § 13.208(d) because these violations occurred less than 2 years before the issuance of the notice of proposed civil penalty, and, therefore, the ALJ properly refused to dismiss the complaint as stale.

Royal Avionics argues that the agency did not notify its president, Robert Reid, of the FAA's intention to take enforcement action for nearly a year after Villarrubia's inspection, and that this delay made it difficult for Royal Avionics to mount a meaningful defense. (Appeal Brief at 1.) The agency, however, had notified Royal Avionics of the investigation by letter addressed to Willeford as early as June 17, 1998, 6 days after Villarrubia's inspection. "Although a letter of investigation does not satisfy the limitation period set forth in 49 U.S.C. § 46301(d)(7)(C) or in 14 C.F.R. § 13.208(d), it does notify a respondent that preserving evidence may become necessary." In the Matter of Werle, FAA Order No. 97-20 at 8-9 (May 23, 1997).

2. Does The ALJ's Denial of a Continuance Constitute Error?

Royal Avionics argues that it was error for the ALJ to deny its request for a continuance. Royal Avionics had listed Bessette on its witness list, but the inspector did not appear at the hearing. When Royal Avionics' president moved to continue the hearing, the ALJ denied the motion, and added: "Let's take the testimony of the persons

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penalty proceedings, such as this case, arising under the Administrator's authority set forth in 49 U.S.C. § 46301(d)(7)(A) and conducted under the rules of practice appearing in 14 C.F.R. Part 13, subpart G.

who are available and at the end of the day see where we are at." (Tr. 9.) Reid did not renew his motion for continuance at the end of the hearing.

The ALJ's action was reasonable, and Royal Avionics has not presented any compelling argument for reversing his decision and/or remanding the case. Royal Avionics could have obtained a subpoena under 14 C.F.R. § 13.228, prior to the hearing to require Bessette to testify but failed to do so. It was Royal Avionics' responsibility to ensure that any individuals whom it wanted to testify attended the hearing. In the Matter of Park, FAA Order No. 92-3 at 9 (January 9, 1992). Reid should have renewed his motion at the end of the hearing if at that point he felt that Bessette's testimony was necessary.

Royal Avionics, moreover, has not shown that Bessette's testimony would have affected the outcome of this matter.[16] According to its amended witness list, dated December 8, 1999, Royal Avionics expected Bessette to testify about the FAA certificates that Royal Avionics currently holds. Such testimony, however, would have been merely cumulative because Willeford testified about the additional ratings that Royal Avionics obtained after the events of this case, (Tr. 55-58). Royal Avionics stated in its amended witness list that it also expected Bessette to testify about Villarrubia's attempt to obtain additional information about Royal Avionics, and about the agency attorney's contact with Bessette after the service of the original witness list. Such testimony likewise would not have affected the outcome of this case.

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[16] Had he appeared at the hearing, Bessette would not have been able to testify as an expert or an opinion witness. Section 13.227 prohibits agency employees from giving expert or opinion testimony for any party other than the FAA in proceedings under Part 13, subpart G. 14 C.F.R. § 13.227.

In its brief, Royal Avionics contended that had Bessette appeared at the hearing, he would have testified that information is available from manufacturers pertaining to the servicing of flux valves. (Appeal Brief at 3-5.) Such testimony, however, is irrelevant regarding whether Royal Avionics held the proper certification to perform this maintenance.[17] Royal Avionics also contended in its brief that Bessette would have testified that the removal and replacement of the weather radar receiver/transmitter was a simple task. (Appeal Brief at 2.) Such testimony would have been cumulative in light of Willeford's similar testimony.

Related to this argument is Royal Avionics' contention that the agency attorney tampered with this witness by questioning him outside the presence of a representative of Royal Avionics. The agency attorney acknowledged at the hearing that she had spoken to Bessette before the hearing and ascertained that the inspector was scheduled to attend training on the date of the hearing but had not received a subpoena. Royal Avionics has not demonstrated that there was anything wrong with this contact between the agency attorney and an agency employee.

3. Did Royal Avionics Perform Maintenance When It Removed and Replaced 421CC's Weather Radar Receiver/Transmitter and N66NC's Horizontal Situation Indicator?

Royal Avionics argues that it was error for the ALJ to hold that the removal and replacement of the weather radar receiver/transmitter and the horizontal situation

[17] Villarrubia testified that the flux valve is not field repairable and that the manufacturer had informed him that data is not available for field repairs of the flux valve. (Tr. 106-109.) Complainant tried to introduce a letter from the manufacturer to Villarrubia on this subject. (Tr. 109.) The ALJ rejected the introduction of this letter into evidence (Tr. 112-114), and stated that he would not give any weight to the inspector's testimony on this issue. Hence, there was no reason for Bessette to testify about whether manufacturers have made data available regarding refilling flux valves with fluid.

indicator constituted maintenance. According to Royal Avionics, the removal and replacement of these units did not constitute maintenance because the very simple procedures did not require it to work on any of the internal parts of these units. (Appeal Brief at 2, 6, 7-8.) Regarding the weather radar receiver/transmitter, Willeford testified that after about a 10-minute test to verify that the unit was not operational, Royal Avionics slid the receiver/transmitter out of its rack[18] and slid in a unit that had been overhauled by Pen Aviation. (Tr. 60-61, 79.)[19] Then, accompanied by Lifelite's director of maintenance, Royal Avionics performed a ground check on the weather radar receiver/transmitter to ascertain whether it was working properly. (Tr. 62, 79.) To replace the horizontal situation indicator, Willeford explained, Royal Avionics only had to unbolt it from the instrument panel, unbolt the remote gyro, and unscrew the flux valve. Royal Avionics then replaced the wiring, and screwed those components back into place. (Tr. 77-78.)

The ALJ wrote in his decision:

> Regulations applicable to repair stations define "maintenance" to include "repair" and "replacement of parts" (14 C.F.R. § 1.1, definition of "maintenance;" see also Tr. 72). And while "maintenance" may include "repair," a repair does not necessarily have to take place in order for maintenance to be accomplished. Willeford's stubborn refusal to concede the plain words of the definition and its applicability to Royal Avionics (Tr. 72) does not change the matter. Simply stated, Respondent's action in removing and replacing the RT constituted maintenance. And "units," whether modified, altered, or simply substituted, may be the subject of maintenance. The FARs[20] make no distinction between types of parts or components for ratings purposes.

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[18] The witness explained that the weather radar receiver/transmitter is a box that is mounted on a slide-in rack, held in place by two thumbscrews.

[19] The unit had a "yellow tag" on it. Willeford testified that the yellow tag signified that Pen Aviation had returned the weather radar receiver/transmitter to service.

[20] Federal Aviation Regulations.

(Initial Decision at 4.)

The ALJ's reasoning is affirmed. Section 1.1 of the Federal Aviation Regulations defines "maintenance" as "inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance." 14 C.F.R. § 1.1 (emphasis added.)[21] The removal and replacement of the weather radar receiver/transmitter and the horizontal situation indicator constituted maintenance because these actions involved the replacement of aircraft parts. It does not matter under Section 1.1's definition of maintenance that Royal Avionics did not open either unit, or repair or replace any of their internal parts. These units were themselves parts of the aircraft, and hence, their removal and replacement fell under the definition of maintenance in 14 C.F.R. § 1.1.

4. Did Royal Avionics Hold an Appropriate Rating for Filling the Flux Valve with Fluid or for Replacing the Horizontal Situation Indicator?

Royal Avionics argues in its appeal brief that because it was a "Class 2 repair station," it had the authority under Section 145.31(e)(2) to perform maintenance on the flux valve, which, Royal Avionics maintains, is a remote indicating instrument. Royal Avionics also argues that the flux valve and the horizontal situation indicator are parts of the autopilot, and that because it was authorized to perform maintenance on the autopilot, it could service the flux valve and replace the horizontal situation indicator.

Preliminarily, it should be noted that while Royal Avionics possessed a Class 2 *radio* rating for navigational equipment under Section 145.31(d)(2), it did not hold a Class 2 *instrument* rating for electrical equipment under Section 145.31(e)(2). *See*

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[21] Preventive maintenance is defined as "simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations." 14 C.F.R. § 1.1 (preventive maintenance). 14 C.F.R. Part 43, Appendix A, § c limits preventive maintenance to the listed work, provided that the work does not involve complex assembly operations.

Complainant's Exhibit 2. It is the Class 2 *instrument* rating for electrical equipment that gives a repair station the authority to maintain any remote indicating instruments. 14 C.F.R. § 145.31(e)(2).

Royal Avionics did hold a limited instrument rating under 14 C.F.R. § 145.33(b)(4) permitting it to maintain numerous models of autopilots. Royal Avionics, however, did not prove that that limited rating authorized it to maintain the flux valve. Willeford acknowledged on cross-examination that the flux valve is a long series of parts from the autopilot system. (Tr. 88.)[22] As the ALJ held, to regard the flux valve as part of the autopilot would "amount to an expansive and unwarranted stretch of aircraft components under the autopilot rubric." (Initial Decision at 5.)

Royal Avionics, likewise, did not prove that the horizontal situation indicator was part of the autopilot. Willeford testified that the horizontal situation indicator is used with the autopilot system, but that the autopilot is a separate component from a horizontal situation indicator. (Tr. 73-75.) Just because the horizontal situation indicator is used with the autopilot system does not mean that it is a part of the autopilot.

5. Did Royal Avionics Return the Aircraft to Service?

Royal Avionics argues, as it did at the hearing, that it did not approve the aircraft for return to service. The ALJ, however, did not make such a finding and, for that matter, Complainant did not allege that Royal Avionics had done so.

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[22] Willeford acknowledged on cross-examination that the flux valve is a long series of parts away from the autopilot. He explained that the flux valve is connected directly to the horizontal system indicator, which is connected to a remote gyro and a slaving switch. The switch, in turn, is connected to a 28-volt DC battery, which is connected to the autopilot. (Tr. 88.)

6. Did Royal Avionics Violate Section 145.33 If It Subsequently Qualified for an Airframe Rating?

Section 145.33 requires that before a repair station performs any maintenance, it must possess an appropriate rating. Thus the public is assured that the certificated repair station is qualified to do the work that it performs. It is simply fortuitous in this case that the FAA later found that Royal Avionics qualified for the airframe rating.[23]

V.

In light of the foregoing, Royal Avionics' appeal of the ALJ's initial decision is denied. The ALJ's decision, assessing a $3,300 civil penalty, is affirmed.[24]

JANE F. GARVEY, ADMINISTRATOR
Federal Aviation Administration

Issued this 15th day of April, 2002.

[23] Any arguments made by Royal Avionics but not specifically addressed in this decision have been considered and rejected, but deemed not deserving of discussion.

[24] Unless Respondent files a petition for review with a Court of Appeals of the United States under 49 U.S.C. § 46110 within 60 days of service of this decision, this decision shall be considered an order assessing civil penalty. *See* 14 C.F.R. §§ 13.16(b)(4) and 13.233(j)(2).