

**HELICOPTERS DIVISION** 

### TECHNICAL INFORMATION LETTER

TIL N° T-109SP-22-002

T-109S-22-003 T-109E-22-003

T-109-22-002

DATE: August 3, 2022

REV.:

To: Leonardo Helicopters products

Owners / Operators / Service Centres

SUBJECT: RDR-2000 Weather Radar Recommended Operator Actions

for Green Block Like External Radar Interference

Helicopters Affected: AW109SP, A109S, A109S with Trekker Kit, A109E, A109K2

### Annexes:

[A]: Honeywell SIL D202204002331: NAVIGATION – RDR-2000/2060/2100 Weather Radar Recommended Operator Actions for Green Block Like External Radar Interference

### Dear Customer,

With the present letter, Leonardo Helicopters (LH) wishes to provide information on a communication issued by Honeywell and relevant to Weather Radar Systems installed on the affected AW109 helicopters.

With reference to Honeywell SIL in Annex [A], for any of the affected helicopters equipped with the Honeywell RDR-2000, P/N 071-01519-0101, flight crews need to be made aware of an anomaly that may be observed during normal weather radar operation

External radar interference may cause "green blocks" to be displayed, which do not correspond to any actual weather phenomena. These green blocks are temporary in nature and will clear once the radar interference ceases or is no longer in range.

Should this effect be observed, no maintenance action is required.

Should you need any additional information, please do not hesitate to refer to LH Engineering Support Team (<a href="mailto:engineering.support.lhd@leonardo.com">engineering.support.lhd@leonardo.com</a>).

Yours Sincerely,

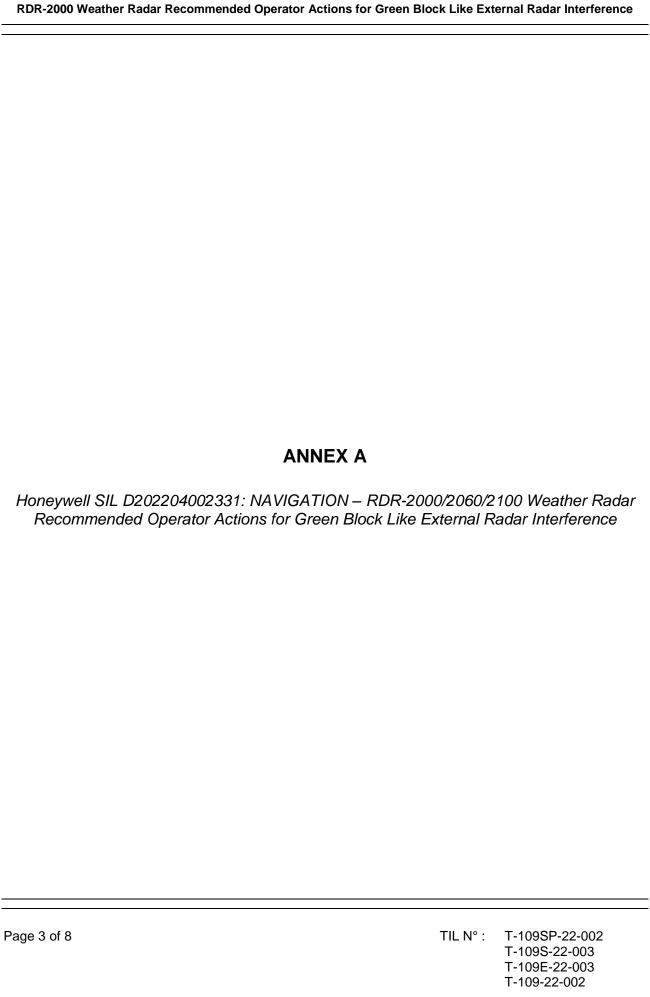
Gabriele Bordino

Head of Product Support Engineering

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### Honeywell

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### SERVICE INFORMATION LETTER

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### A. Subject

NAVIGATION – RDR-2000/2060/2100 Weather Radar Recommended Operator Actions for Green Block Like External Radar Interference

### B. Effectivity

(1) This Service Information Letter (SIL) is applicable to all RDR-2000, RDR-2060, and RDR-2100 Weather Radar Systems which include an ART-2000, ART-2060, or ART-2100 Antenna-Receiver-Transmitter unit. The following list of hardware components apply to this SIL.

Table 1. Hardware Components

Part Number (PN)	Component Description
071-01519-0101	ART-2000 Antenna-Receiver-Transmitter Unit
071-01550-0201	ART-2060 Antenna-Receiver-Transmitter Unit
071-01550-0101	ART-2100 Antenna-Receiver-Transmitter Unit

(2) This SIL is applicable to all RDR-2000, RDR-2060, and RDR-2100 Weather Radar Systems which include an ART-2000, ART-2060, or ART-2100 Antenna-Receiver-Transmitter unit. The following list of aircraft platforms apply to this SIL.

Table 2. Aircraft Platforms

Aircraft Platform	Original Equipment Manufacturer (OEM)
A109E	Leonardo
A109K2	Leonardo
A109N	Leonardo
A109S	Leonardo
A109S (Trekker)	Leonardo
AW109SP	Leonardo
AS365 Dauphin/565 Panther	Eurocopter

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Table 2. Aircraft Platforms (Cont)

Aircraft Platform	Original Equipment Manufacturer (OEM)
DHC-6 Series 400	de Havilland
DHC 8-400/Q400	de Havilland
H135	Airbus Helicopters
H145	Airbus Helicopters
PC-12	Pilatus
PC-12NG	Pilatus
PC-24	Pilatus
S-70A/B/I/M	Sikorsky
Y-12 (F)	Harbin

### C. Reason

- (1) The ART-2000/2060/2100 Weather Radar Antenna-Receiver-Transmitter may occasionally display false radar returns that are produced by either another aircraft's weather radar system, or by a ground based military radar facility. These sources of false radar returns are known as radar interference. These occasional radar interference returns usually only last a relatively short period of time before leaving the radar display; however, occasionally if the radar interference source is on the same heading as your aircraft, such as directly approaching a source of ground-based radar interference, it may take up to 30 minutes for your aircraft to fly past and eliminate the source of the interference.
- (2) Some aircraft operators have observed a particular type of external radar interference that can appear as "green blocks" as seen in the Figure 1 that was taken from the Honeywell owned, King Air flight test aircraft. As indicated by the red arrows, you can see some examples of this "green block" type of external radar interference. The action of the flight crew is to ignore this interference. It will usually be eliminated from the radar display in a relatively brief time once either the source of the interference ceases transmissions or your aircraft flies past the source of the interference.

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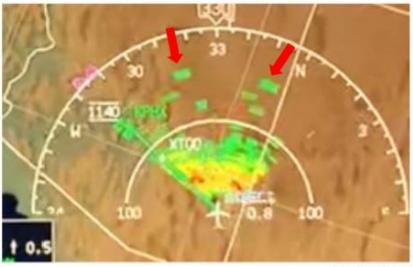
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ICN-55939-0000952838-001-01

Figure 1. Green Blocks

### D. References

- To find, see, and download Honeywell Technical Publications, go to https://aerospace.honeywell.com.
- (2) The documents that follows are related to this SIL. Unless specified differently, you can use subsequent revisions.
  - RDR-2000 Weather Radar System Installation Manual, Technical Publication Number 006-00643-0007.
  - RDR-2000 Weather Radar System Pilot Guide, Technical Publication Number 006-08755-0001.
  - ART-2000 Weather Radar Antenna-Receiver-Transmitter Component Maintenance Manual, Technical Publication Number 006-05332-0003.
  - RDR-2060/2100 Weather Radar System Installation Manual, Technical Publication Number 006-00648-0002.
  - RDR-2060/2100 Weather Radar System Pilot Guide, Technical Publications Number 006-18002-0000.
  - ART-2060/2100 Weather Radar Antenna-Receiver-Transmitter Component Maintenance Manual, Technical Publication Number 006-05390-0001.

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#### E. Action

- (1) Some aircraft operators have observed a particular type of external radar interference that can appear as "green blocks." The recommended action for the flight crew is to ignore this interference. It will usually be eliminated from the radar display in a relatively brief time once either the source of the interference ceases transmissions or your aircraft flies past the source of the interference.
- (2) Honeywell highly recommends to our RDR-2000/2060/2100 operators that they do not send their radar units back to Honeywell when "green block" interference is observed. Returns for this reason could incur unnecessary service charges if no technical problems are found with the unit.
- (3) For additional information regarding external radar interference refer to the RDR-2000 and RDR-2060/2100 Weather Radar System Pilot guides which are listed in the Paragraph D. of this SIL.

#### F. Contact Information

 The Honeywell Aerospace Technical Support team can be contacted for additional information on this SIL.

Honeywell Aerospace Technical Support

Telephone: 800-601-3099 (Toll Free U.S.A./Canada)

Telephone: 602-365-3099 (International Direct)

Option 1 for Forge Services or Option 2 for Avionics or Option 3 for Mechanical.

E-mail: AeroTechSupport@honeywell.com Website: https://aerospace.honeywell.com

### G. Summary of Change

This revision is a FULL replacement. This revision includes the changes that follow:

- Added Aircraft Platforms A109E, A109K2, A109N, A109S, A109S (Trekker), AW109SP and its OEM details in Table 2.
- Deleted Aircraft Platforms EC155, EC225/AS332 and its OEM details in Table 2.

### H. Revision History

This service information letter has had two revision(s) as shown in Table 3.

Table 3. Revision History

Revision Number	Revision Date
0	7 Apr 2022
1	26 Apr 2022
2	8 Jul 2022

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