Greater accuracy means shorter searches, faster rescues and more lives saved.

When it comes to airborne Search and Rescue (SAR) missions, saving time is often the difference between a rescue and a recovery. That’s why government, military and civilian SAR organizations are upgrading their aircrafts’ DF capabilities with Rockwell Collins’ DF-430 Multi-Mission Direction Finder.

Lightweight, compact and rugged, the DF-430 is specifically designed to receive and interrogate all current international distress frequencies including 121.5 MHz, 243 MHz, 406 MHz, as well as ARGOS and COSPAS-SARSAT encoded beacon signals. When integrated over the MIL-STD-1553B or ARINC 429 data busses, the DF-430 can provide the beacon’s Lat/Lon along with its unique identifier at ranges up to 116 NM. Once identified, the pilot of a SAR aircraft enters the coordinates into the FMS and flies directly to the beacon’s location. With the DF-430 on your SAR team, time saved is lives saved.

Proven SAR performance
The DF-430 has been in production for over 10 years and there are over 2,000 units in service with government and military SAR providers including the U.S., Italian and Canadian Coast Guards. It is also serving military SAR/CSAR units throughout Europe, and in Japan, Taiwan, New Zealand and Australia.

The system is currently installed on a wide array of fixed-wing and rotary SAR aircraft including the Lockheed Martin C-130 and P-3, Boeing P8-A, Alenia C-27J, CASA CN-295, CASA HC-144A and other popular transport aircraft. The list of rotorcraft currently using the DF-430 includes NH Industries NH-90, Mil Mi-8, PZL W-3, Eurocopter Super Puma, MH-65, and Sikorsky MH-60T, S-70A, S-70B and S-92. Whether serving aboard airplanes or helicopters, the DF-430 is the proven airborne direction finding solution of choice around the world.

**KEY FEATURES**
- 30 - 407 MHz frequency range
- Flush-mounted omni-directional, vertically polarized antenna with permanent 360° scanning
- Lightweight – less than 3.3 kg
- Compact design
- Easy installation and integration with MIL-STD-1553B and ARINC 429 avionics
- No external receiver required
- No calibration required
- Flight acceptance reduced to one hour
KEY BENEFITS

- Proven international and domestic platform/program versatility
  - USA
    - USCG platforms tested to 406.025, 406.028 and 406.037
    - P-8A (MMA)
    - and others
  - European
    - NH90/A400M
    - C-295/CN-235
    - and others
  - International
    - 767 tanker program
    - Indian ALH
    - International Black Hawk and S-92
    - and others
- Easy installation and system integration
- Multi-Mission government, civilian and military SAR
- High reliability:
  - MTBF as per MIL-HDBK-217 calculated at over 3,900 hours for ARW and over 14,025 hours for AIC (at 35°C)
- Matches almost all types of aircraft bus architecture:
  - Full MIL-STD-1553B and ARINC 429 configurability
- Highly cost effective
- Designed to meet tomorrow’s SAR needs:
  - Software upgradable to meet all future COSPAS-SARSAT frequencies
  - Ready to host new 406 MHz downlink protocol for the new Galileo SAR system

TECHNICAL SPECIFICATIONS

General radio specifications

Frequency range 30 - 407 MHz
Antenna Omni-directional, vertically polarized

Receiver characteristics

30 - 407 MHz coverage All VHF and UHF frequency bands including the distress frequencies:
30 - 87.975 MHz 25 kHz steps
108 - 118 MHz 25 kHz steps
(especially VOR modulation)
118 - 136 MHz 25 kHz steps
or 8.33 kHz steps
136 - 173.975 MHz 25 kHz steps
(compatible with 99 channels sonobuoys)
225 - 399.975 MHz 25 kHz steps
121.5 MHz, 243 MHz distress
and 406.025 MHz frequencies
ARGOS and COSPAS-SARSAT frequencies

Precision figures Bearing intrinsic accuracy <3° over 360° for the whole frequency range 30 - 407 MHz
Bearing intrinsic stability <±5° at the sensitivity limit

Bearing acquisition delay Bearing acquisition time
<200 msec

Physical and environmental characteristics

<table>
<thead>
<tr>
<th>Weight</th>
<th>ANT-430</th>
<th>3.0 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BC-125</td>
<td>0.8 kg</td>
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<tr>
<td></td>
<td>RPU-430</td>
<td>3.3 kg</td>
</tr>
<tr>
<td></td>
<td>MT-125</td>
<td>0.93 kg</td>
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<tr>
<td>Size/dimensions</td>
<td>ANT-430</td>
<td>266.7 mm diameter/97.7 mm height</td>
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<tr>
<td></td>
<td>BC-125</td>
<td>146 x 120 x 65.5 mm</td>
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<tr>
<td></td>
<td>RPU-430</td>
<td>57.2 x 367.15 x 193.5 mm</td>
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<tr>
<td></td>
<td>MT-125</td>
<td>80 x 120 x 347 mm</td>
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<td></td>
<td>(for 1/4 ATR processor)</td>
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<tr>
<td>Operational temperature</td>
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<td>RPU-430</td>
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<td>Storage temperature</td>
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<td>BC-125</td>
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<tr>
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<td>RPU-430</td>
<td>-55°C to +90°C</td>
</tr>
</tbody>
</table>

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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