



Non-destructive Inspection Airman chips in to keep Cope West 23 going

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ROESMIN NURJADIN AIR FORCE BASE, INDONESIA -- Sometimes what feels like a small piece of the puzzle can play a huge role in the success of a mission.

That can be especially true for non-destructive inspection Airmen such as U.S. Air Force Staff Sgt. Daniel Lara, 8th Maintenance Squadron NDI craftsman, whose job really begins after an aircraft lands.

After the aircraft lands, Lara receives a small piece called a magnetic chip detector from each jet that was flown. This chip is a part of the engine, and its magnetic tip attracts foreign materials that might be in the engine oil.

"NDI ensures our fuel isn't contaminated," said U.S. Air Force Master Sgt. De'Ante Miller, 8th Maintenance Squadron Alternate Mission Equipment section chief. "Working with a host nation vendor with contracted fuel, it's super pivotal. We wouldn't have any planes getting in the air."

Lara does this by cleaning excessive oil from the chips and running samples he's prepared from their magnetic tips through a machine, called a ChipCHECK, that is capable of detecting foreign materials using laser spectroscopy to not only determine if a foreign material is present but also identify that material, which in turn helps narrow down what and where a problem is.

"We're monitoring the engine health, making sure that the engines are working properly," Lara said. "If there was any problem with the engines, our ChipCHECK system would be able to catch any type of maintenance that would be necessary early on. So, it's more preventative maintenance."

It only takes about five minutes to run each sample, but each test is crucial in making sure the engines are working within permissible and safe operational levels.

"He goes into his lab and knocks it out," Miller said. "It's a quiet job."

It may be a quiet job, but when done properly, it prevents not only a lot of noise and problems for the pilots and maintainers, but it also ensures they are able to continue focusing on integrating with their Indonesian Air Force counterparts and keep the Cope West 23 exercise going.

