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**Committee on the Peaceful  
Uses of Outer Space****Information furnished in conformity with the Convention  
on Registration of Objects Launched into Outer Space****Note verbale dated 22 June 2021 from the Permanent Mission of  
the United Kingdom of Great Britain and Northern Ireland to the  
United Nations (Vienna) addressed to the Secretary-General**

The Permanent Mission of the United Kingdom of Great Britain and Northern Ireland to the United Nations (Vienna), in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution [3235 \(XXIX\)](#), annex), has the honour to transmit registration information concerning the space object Satellite for Orbital Aerodynamics Research (SOAR) (see annex).<sup>1</sup>

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<sup>1</sup> The data on the space object referenced in the annex were entered into the Register of Objects Launched into Outer Space on 28 June 2021.



## Annex

### Registration data on a space object launched by the United Kingdom of Great Britain and Northern Ireland\*

#### SOAR

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067SM
Name of the space object	Satellite for Orbital Aerodynamics Research (SOAR)
State of registry	United Kingdom of Great Britain and Northern Ireland
North American Aerospace Defense Command Catalogue Number (NORAD ID)	48850
Date and territory or location of launch	14 June 2021 at 0905 hours UTC; Space-based launch from the International Space Station (ISS)
Basic orbital parameters	
Nodal period	92.93 minutes
Inclination	51.64 degrees
Apogee	421 kilometres
Perigee	415 kilometres
General function of the space object	SOAR is to demonstrate aerodynamic materials (specifically, materials which specularly reflect atomic oxygen in the free molecular flow environment), and aerodynamic attitude and orbit control. The payloads include an ion and neutral mass spectrometer to characterize the flow/atmospheric environment, and deployed steerable fins with different surface coatings to be used as aerodynamic surfaces

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	University of Manchester
Website	<a href="https://discoverer.space">https://discoverer.space</a>
Launch vehicle	Deployed from ISS

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\* The information was submitted using the form prepared pursuant to General Assembly resolution 62/101 and has been reformatted by the Secretariat.