EXH. 1 - REQUEST FOR EXPERIMENTAL AUTHORIZATION

L3Harris Technologies, Inc. ("L3Harris") hereby requests an experimental license to support mobile experimental testing, evaluation, and demonstration utilizing an Intellian V130NX HP 1.25m antenna placed aboard US Naval vessels operating in the below noted USNS territorial waters in the Ku Band frequency range of 14.0-14.5 GHz. The testing will be in support of the US Navy and will continue to demonstrate the antenna's mobile ability to communicate with associated transmitting and receiving network equipment using the SES SKALA geosynchronous global satellite network to enable the required temporary network connection. L3Harris currently has mobile license aboard the US Naval vessel operating under FCC File No. 0982-EX-CN-2023. Both antennas will be radiating simultaneously on separate satellites and transponders.

The requested mobile points are:
*33° 49' 41" N, 117° 54' 11" W, w/i 322 km radius in USNS waters NAS Point Magu, California

*28° 29' 25" N, 80° 34' 22" W, w/i 322 km radius in USNS waters off Cape Canaveral, Florida

*19° 54' 31" N, 159° 20' 07" W, w/i 322 km radius in USNS waters off Hawaiian Islands, Hawaii

All experimental testing will be conducted in conjunction with a contract for the US Navy. Accordingly, the applicable POC/Contract information is provided below.

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Contract # N00030-18-C-0001 (CLIN 0090)

L3Harris will adhere to any Special Conditions deemed necessary and acknowledges that all mobile experimental operations conducted in the requested bands will be on a non-interference basis.

Because the equipment is technically incapable of providing station identification, L3Harris respectfully requests a waiver of the station identification provisions of Section 5.115 of the Commission's rules, 47 C.F.R. § 5.115. All network traffic will be simulated traffic only, solely for evaluation purposes and not for the purpose of providing network data communications services to user stations.

L3Harris submits that a grant of this experimental request is necessary and in the public interest because it will advance national security efforts by contributing and assisting in the further development of communications equipment utilized by the U.S. Armed Forces.

The **stop buzzer contact** for this project will continue to be Troy Ballard, Engineer at L3Harris, tel: 714-758-3351, e-mail: troy.ballard@l3harris.com

Directional Antenna Information

Directional antenna will demonstrate the antenna's ability to communicate with associated transmitting and receiving network equipment using the SES SKALA geosynchronous global satellite network

(a) Width of beam in degrees at the half-power point: 0.6
(b) Orientation in horizontal plane: 114.2 - 199.7
(c) Orientation in vertical plane: 23.5 - 48.8

Satellite pointing:
SES-15 AZ: 199.7° (true) EL: 48.8°
SES-1 AZ: 151.4° (true) EL: 46.7°
SES-10 AZ: 114.2° (true) EL: 23.5°

Frequency Tolerance:
5*10^(-6)%