WASHINGTON, Oct. 2— The Federal Bureau of Investigation said today that it had arrested a United States naval analyst and charged him with selling classified satellite photographs of a Soviet ship to a British weekly defense publication. A spokesman for the F.B.I. said Samuel Loring Morison, a civilian analyst at the Naval Intelligence Support Center in Suitland, Md., was arrested Monday evening at Dulles International Airport.

Mr. Morison, 40 years old, of Crofton, Md., is the grandson of Samuel Eliot Morison, a well-known naval historian. An affidavit filed in Federal Court in Maryland said Federal agents obtained evidence in the case by analyzing his office typewriter ribbon to decipher a letter he had written to a British editor. Mr. Morison appeared today before a United States Magistrate, W. Harris Grimsley, and bond was set at \$500,000. Mr. Morison, a civilian employee of the Navy since 1974, has been charged with the unauthorized disclosure of three photographs of a Soviet aircraft carrier being built at a Black Sea naval shipyard.

The pictures were published Aug. 11 by Jane's Defense Weekly, a British journal with a circulation of 22,500. A spokesman for Jane's, Richard Coltart, said that Mr. Morison was not an employee of the weekly but that he did receive a yearly retainer for his work as United States editor of Jane's Fighting Ships. A Federal affidavit said he was paid \$5,000 a year. Mr. Coltart, in a telephone interview, would not say how the weekly obtained the photographs of the Soviet ship. He said the journal does not usually try to buy classified information. A Navy spokesman said Department of Defense employees were not barred from writing for publications such as Jane's. But he said the material had to be reviewed in advance. He could not say if Mr. Morison had made such arrangements.

The Federal affidavit submitted by Jerald C. Wall of the F.B.I. and David W. Swindle of the Naval Investigative Service said the satellite photographs were based on three pictures taken from the Naval Intelligence Support Center in late July. In the investigation, Federal agents seized Mr. Morison's office typewriter and analyzed the ribbon to reconstruct his correspondence. According to the affidavit, Mr. Morrison wrote to Derrick Woods, the editor of Jane's Defense Weekly in July that he should not expect a "shipment every week" because this would be "pushing his luck." Mr. Morison is quoted as saying that "he would continue sending items as they appear of value." He then thanked Mr. Woods "for the remuneration for items sent," adding that "he had not expected anything."