

The Cessna Conquest provides a cost-effective remote sensing platform. It would be capable of operating with a crew of three with aerial cameras and a thermal linescanner, or with a synthetic aperture radar by itself. These would be reasonable sensor configurations since nighttime thermal imagery will often be complemented with daytime photography to assist in the interpretation. SAR imagery is typically acquired as a stand-alone product, particularly if the target area is perpetually cloud-covered. The particular Conquest shown in Figure 20 has been equipped with a SAR. An aircraft such as this would cost about \$3 million when new.¹

A de Havilland Dash 8 Series 300 would serve as a good general-purpose platform. It has enough room for a comprehensive suite of sensors and associated equipment while retaining an ability to transport inspection teams as well. It provides a range in excess of 2,000 nautical miles. Figure 22 illustrates the ferry distances and times which would be required by aircraft operating out of Stockholm and Zurich to cover the "Atlantic to the Urals" area in Europe. Short field capability ensures that the aircraft would be able to operate from the vast majority of European airfields. A Dash 8 Series 300 would cost about \$11 million to purchase.²

The Canadair Challenger is a jet rather than turbo-prop aircraft. It would be capable of transitting long distances quickly. Like the Dash 8, it would be capable of carrying a full suite of sensors and passengers. However, executive jets such as the Challenger have a number of disadvantages. They have relatively high stall speeds, restricting their ability to acquire large-scale imagery. They have higher purchase and operating costs. The purchase price for a

¹ Ken Wilson, Ken Wilson Aircraft Sales. Personal communication.

² Airborne Remote Sensing for C.F.E. Verification: The Platform. op. cit., p. 23.