

accidents is not confined to that of general war; there are also several other sorts of accidents to be considered.

First, there is the significant risk of an accident involving a single nuclear weapon. This danger is not without significance in the French case, because of the large number of accidents which have occurred involving French nuclear-capable aircraft and missiles. This is not a specifically French problem; there is some evidence that the newly-deployed American Pershing II and cruise missiles are far from completely reliable.

Second, there is the risk of an accident in the stockpiling process. We have no data concerning this risk, but we do know that weapons-grade plutonium stockpiles are subject to inventory "shrinkage", indicating a danger at this stage as well, since the whereabouts of what is unaccounted for is unclear.

Third, there are the risks involved in the actual manufacture of weapons-grade plutonium itself, especially at the fast-breeder reactor at Malville. It is well known that such reactors are much more dangerous than ordinary pressurized light water reactors.

The French experience also revealed a risk not yet discussed at this conference – the possibility that civil conflict might result in the illicit seizure of nuclear weapons by a rebel group. During the "Generals' Revolt" of 1961 some of the rebel forces apparently attempted to seize a nuclear weapon which was being readied for testing in the Sahara. To forestall this, the weapon was detonated prematurely.

A further problem for France is that of control. The French command system is totally centralized; only the personal order of the President of the Republic can release the "force de frappe." But in any conceivable scenario, the President would have less than ten minutes to decide whether to give the order. To counter with the hollow boast that the President has "nerves of steel" is to fly in the face of everything we know about human psychology. The French nuclear doctrine is that of *presidential infallibility*, analogous to the doctrine of papal infallibility, except that in our case "God" is the H-bomb.

Dean Babst's paper recommended the creation of accidental war assessment centres around the world to be funded in a way commensurate with the degree of the péril. He asserted that non-nuclear nations could contribute to the world's arms reduction efforts by publicizing their own studies on accidental nuclear war. He noted in particular that computerized analytical models are good tools for assessing the dangers of accidental nuclear war. They can anticipate dangers, provide quick answers and build increasingly sophisticated scenarios; and they cost relatively little.

A first step in fostering assessment centers has been the creation of the Accidental War Information Exchange by the Nuclear Age Peace Foun-