The Department of State is therefore chary of causing an international dispute by an unseemly wrangle over \$31,000.

The GAO argues that special services provided by the US government should be charged at their full cost, and that Comsat is now a viable commercial concern which ought to pay its full share (it recently reported a net income for the first quarter of 1971 of \$4,978,000). A Comsat official said last week that the GAO report is being considered by the company, and pointed out that \$31,000 should be compared with the \$30 million it costs to launch each satellite. Comsat would, however, resist any attempt to change the basis for charges incurred by the launching of Intelsat IV satellites.

**TUBERCULOSIS** 

## **Ribicoff lashes CDC**

by our Washington Correspondent SENATOR Abraham Ribicoff has, in the past few weeks, shown little respect for the agencies which he regulated when he was Secretary of Health, Education and Welfare in 1961-2. Two weeks ago, he lashed the NIH's Division of Biologics Standards for allegedly relying on dubious techniques for testing influenza vaccines, and last week the Food and Drug Administration and the Center for Disease Control were the subjects of his wrath for the part they played in the mass TB immunology programme on Capitol Hill last year, during which two people died of hepatitis. Senator Ribicoff's chief complaint is that the Center for Disease Control, which supervised the programme, gave 300 mg single doses of isoniazid—the drug commonly used for treatment and prevention of tuberculosis, instead of the usual treatment of three separate 100 mg tablets.

Based on an investigation conducted by the General Accounting Office, Senator Ribicoff's allegations were made in a stinging speech delivered in the Senate. He said that in 1964 the Center for Disease Control asked for permission to start investigational use of a 300 mg tablet of isoniazid. Under FDA rules, the centre should have supplied information derived from animal tests, and an outline of the planned investiga-"CDC supplied virtually none of this information to the FDA," Ribicoff claimed, "Instead, the CDC doctors started an accelerated experimental programme on a wide range of human subjects." Part of this experimental programme included the mass treatment of Capitol Hill employees last year after some cafeteria staff had contracted tuberculosis.

A spokesman for the FDA last week, however, although admitting that the agency "did not push the CDC for its

experimental results", suggested that the CDC's action in the Capitol Hill programme simply followed accepted medical practice. He also pointed out that the two people who died from hepatitis during the programme showed symptoms of the disease eight months after they began taking the drug. Nevertheless, the latest bulletin of the FDA points out that it has recently changed the labelling on isoniazid to the effect that the drug should not be used if

hepatic disease is suspected, and that the patient should be closely monitored. Alongside the announcement, however, the FDA bulletin contains an editorial by Gordon M. Meade, formerly medical director of the American Thoracic Society, who points out that "isoniazid remains a powerful and very effective antituberculosis agent which merits continued therapeutic and prophylactic use even though liver dysfunction can be associated with its use".

## **Short Notes**

by our Washington Correspondent

## Fort Worth

A CONFERENCE committee set up to decide the future of the Public Health Services Hospitals in general, and the drug rehabilitation centres at Lexington in Kentucky and Fort Worth in Texas in particular, reached deadlock on October 7. The Department of Health, Education and Welfare, frustrated in its plans to transfer the Fort Worth facility to the Bureau of Prisons, seized its chance and ordered the facility closed and all patients sent back for treatment in their home communities within twenty-four hours. The result: Congress was presented with a fait accompli, and, according to Mr James C. Wright, Texas representative in the House of Representatives, at least half of the ninety-two addicts discharged were taking drugs again before the weekend was finished.

The trouble was that in its desire to transfer the facility to the Bureau of Prisons, the Department of Health, Education and Welfare overlooked the fact that October 8 was a Friday. Consequently, many of the addicts could not be reached by representatives of their local rehabilitation centres for nearly three days, and not surprisingly many returned to the habit-none had been under treatment for more than four months. Mr Wright, who set his committee investigators to look into the fate of the addicts, found one pushing drugs in New Orleans; another smashed up a car and was jailed for speeding

and was later found to be high on drugs. Mr Wright described HEW's actions as "a flagrant breach of good faith with Congress". He said, "I was stunned that a Federal agency would stoop to using drug victims as pawns in a power play to thwart the will of Congress."

## Science in School

FIGURES released this week by the National Science Foundation show that the number of schoolchildren in public schools opting for science subjects increased by a factor of 2.5 between 1948-49 and 1969-70-faster than total enrolment which for grades 9 to 12 increased 2.3 times over the same period. "The steady proportional growth of enrolments in such basic core courses as introductory algebra, introductory geometry, biology, and chemistry indicates a basically healthy state of science interest at the high school level," the NSF claims. The figures released, however, unfortunately include no discussion of recent trends which may reflect the growing disillusionment with science and technology in the present state of concern about the environment, and the NSF's optimism is therefore difficult to question. One fact which mars the optimism is that enrolments in physics have lagged dramatically during the past two decades-in 1949, 28 per cent of the 12th grade were enrolled in physics courses, but in 1970 the percentage had dropped to 18.

**Table 1** Enrolment in Selected Science and Mathematical Courses in Grades 9 through 12 in US Public Secondary Schools as a Percentage of Total Enrolment in the Grade in which the Course is Usually Offered

Grade in which usually offered	1948-49	Per cent 1960-61	1969–70
10	71	85	96
11	33	39	39
12	28	23	18
ences:			
12	25	17	32
12	18	17	19
12	5	8	13
lgebra 9	64	66	75
eometry 10	40	45	46
tics 11-12	27	32	31
	usually offered  10 11 12 ences: 12 12 12 12 12 lgebra 9 eometry 10	usually offered 1948–49  10 71 11 33 12 28  Inces: 12 25 12 18 12 5  Igebra 9 64 eometry 10 40	usually offered 1948–49 1960–61  10 71 85 11 33 39 12 28 23  Inces:  12 25 17 12 18 17 12 5 8  Ilgebra 9 64 66 eometry 10 40 45

Source: National Science Foundation adapted from Office of Education data.