



An Astronomer in Czechoslovakia

By Robert F. Howard

A staff member of the Mount Wilson and Palomar Observatories reports on his six months at the Ondřejov Observatory near Prague—just before the political upheaval and invasion of that country.

Astronomy is one of the more international of the sciences, and this is particularly true of solar astronomy. It is a small field; we are all watching the same sun; and no one is in a good position to watch it all the time. As a consequence, international cooperation is quite common, and international meetings are almost never marred by political differences. Visits by American solar astronomers to the Soviet Union and Eastern Europe are fairly common. So, a trip to Czechoslovakia was not an unusual possibility for me to contemplate; in fact, it was a rather natural thing to do following a similar stay in 1964 at the Mount Wilson

Observatory by a Czech solar astronomer with whom I had worked closely.

I spent an interesting and rewarding six months—from August 1967 to February 1968—at the Ondřejov Observatory near Prague, under the auspices of the Inter-Academy Exchange Agreement between the academies of sciences of the United States and Czechoslovakia. Fortunately my wife and three children were able to accompany me.

The Ondřejov Observatory, operated by the Astronomical Institute of the Czechoslovak Academy of Sciences, is located in the village of Ondřejov, 30

miles east of Prague. The observatory recently purchased an abandoned hotel in a region of summer homes a mile or two from Ondřejov, and here we took up residence for the first few weeks of our stay.

We enjoyed our summer place very much. It was isolated, but there were fascinating places in the neighborhood for the family to explore—the river, the fields of wheat and potatoes, the orchards, and the farm animals, which for our city-bred children were sources of awe and wonder. And nearby there was a beautiful, broad, four-lane concrete bridge, about 200 yards long, spanning a lovely green valley. But there was no road at either end of the bridge; it led from nowhere to nowhere. The story is that the bridge was built during the last years of the German occupation as a part of a proposed autobahn that was to connect Prague and Brno. It is a sad commentary on the state of the Czech economy over the last 25 years that the highway remains unbuilt. However, the bridge is a beautiful landmark in the rolling countryside around Ondřejov, and on Sunday afternoons the local people stroll up and down the bridge pushing their baby carriages.

LIFE IN PRAGUE

We had timed our stay in Czechoslovakia to begin shortly before the General Assembly of the International Astronomical Union held in Prague in August. Shortly after the end of the Assembly we moved from the country into an apartment in Prague so that we could send our children to the International School of Prague located at the American Embassy there. Housing in Prague is very tight, and the best the Academy could do for us was half of a large apartment; the other half was occupied by a Czech family. Despite language difficulties, we became good friends. There were six children altogether in the apartment, which rarely made for a dull day.

Living in Czechoslovakia involves some minor hardships to which a resident of southern California is not generally accustomed. Since all the shops are government operated, they tend to have the same hours, and these hours are short by our standards. Although there are stores near the center of Prague that might qualify as supermarkets, where we lived it was necessary to buy meat at a butcher shop, bread at a bakery, and milk at a dairy. And every place there were the inevitable queues—sometimes two queues; one to select the item and one to pay for it.

Marketing, therefore, was a daily chore that consumed a great deal of time. It was common practice

for people to leave work to shop. In fact, it did not seem unusual for people to take off some hours or a whole day to handle their private affairs, which generally consisted of standing in long queues in government offices for one purpose or another. One of the services afforded us by the Czech Academy was to provide an assistant who spent a total of four or five days standing in queues for us in various government offices in connection with details such as visa extensions.

The International School of Prague was truly international in character. Nearly a hundred children of employees from many embassies attended, as well as the children of people such as ourselves and those who worked for international airlines or were newspaper correspondents. The principal, the textbooks, some of the teachers, and all of the methods were American. (Some of the teachers were Czechs.) In principle, the school was open to anyone, and the modest tuition could be paid in Czech currency. But there weren't any Czech children enrolled while we were there. Our children enjoyed it immensely and made great progress with their studies. Every day's play period with their school friends was a geography lesson. Among other things, they learned from their Egyptian friends that Egypt possesses the strongest army in the world.

ASTRONOMY AND ASTRONOMERS

The Czechs have put more resources into astronomy than any other Soviet satellite country has, and this has paid off in the sort of prestige that comes with a strong position in a pure science. For many years before World War II, Ondřejov Observatory, private and well equipped, provided a good and inexpensive nucleus for a modern observing station, and a young crop of astronomers in the early 1950's provided the initiative and drive necessary to secure the funds needed to carry on research. On the whole the observatory continues to be well funded in Czech currency. It recently purchased an 80-inch telescope from the East German Zeiss Company. But it is suffering more and more each year from the technological gap resulting from the fact that more sophisticated control and data-gathering, handling, and processing equipment is becoming available only to those who have dollars to pay for it—and dollars are in very short supply in Czechoslovakia.

Other troubles that hamper the work at the observatory seem to be a reflection, on a small scale, of the troubles that plague the Czech economy as a whole.

Despite the rather liberal spirit that appears to be widespread among the populace, the structure of their society is of a conservative revolutionary nature—much more so than in the Soviet Union. Salary scales are much compressed, so that the ratio of salaries between the lowest paid worker and the director of the institute or factory is surprisingly low—about two or three to one. Inefficiency and work that is slow almost to the point of sabotage are universal. For example, despite the fact that there were two employees to look after office supplies at the observatory—a function which does not even exist here except as a minor duty of a secretary—the supply of observatory stationery became exhausted in the middle of my stay there, and, because it required a long time to obtain stationery, we did without it for several months.

One of the results of the compressed pay scales is that there is little incentive for a young person to go on and get a university degree. There is almost a total lack of people under the age of 40 in astronomy. There are only a handful of students, and there are the most active astronomers, who are in the age bracket 40 to 50; but in between there is a missing generation.

It is no picnic being an observatory director in Czechoslovakia. Much of the authority is delegated to the Labor Union, and the local (observatory) Communist Party seems to have some say in what goes on as well. This certainly makes an administrative nightmare out of running the observatory. The director is afraid to make any move which might offend the Party or the Union, and firing an employee is practically impossible except in the most extreme circumstances. In the lobby of the main office building there is kept a book in which each employee is expected to note each day the times of his arrival and departure. This regulation applies equally to the astronomers—a condition which the staffs of most academic or research institutions in this country would consider intolerable.

OF POVERTY AND EFFICIENCY

We were saddened by the dismal lives led by the vast majority of the Czech people. What we would consider poverty exists there on a scale unknown in this country. Prague is the only place where I have ever seen people scoop uneaten food from our plates as we rose to leave a restaurant. In some areas, however, the government has done a good job: garbage

collection is efficient and clean, and rats have been practically eliminated; public transportation is convenient and inexpensive; and medical care is good and available to all. Doctors make frequent house calls to all, not just to foreign visitors. I suppose this is because very few people own cars. (The doctor arrives in a chauffeur-driven car.)

OF POLITICS AND PROPERTY

In our small circle of Czech acquaintances who were not connected with the observatory, there were more than just a few who had spent some time in prison since 1948. Moreover, they seemed in no way to be ashamed of this fact. It is true that our circle of friends was probably not a random selection of Czech citizens; nevertheless, the large percentage who had been imprisoned surprised us. In all cases the offenses had been of a political nature. These people were full of stories of property that had been confiscated from them at the time of the Communist take-over, and they were full of disdain for the mess the Communists had made of the country after humiliating the capitalist and manager classes and declaring them to be a detriment to their society.

Occupation and domination by a foreign power is nothing new to the Czechs; they have suffered such treatment for centuries. In this age when young people all over the world are rebelling against the values of their elders, the youth of Czechoslovakia are taking a valiant nationalistic stand in favor of freedom of expression. Twenty years of propaganda in newspapers, banners, television, and textbooks seem to have had no positive effect whatsoever.

One incident sticks in my mind as having significance with regard to the attitude of the older generation. We were planning a trip by car to Slovakia, and an acquaintance was showing me a suggested route. For this purpose he used a prewar road map of the country, which was quite adequate since there had been no significant changes in the roads in 30 years. As we discussed the trip, one of our pro-Russian Czech friends entered the room. He picked up the map and was obviously admiring the fine quality of the paper and the convenient manner in which the folds had been arranged, despite the fact that it was a Czech product in the Czech language. My companion said to him in Czech, "It is prewar," which is a euphemism for pre-Communist. My leftist friend handed back the map with a look on his face that said, "Of course. How stupid of me. And in front of a Westerner, too."